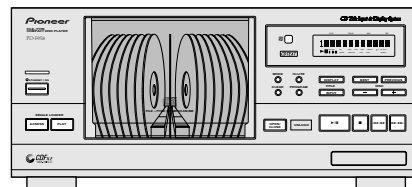


# Service Manual

Pioneer



ORDER NO.  
RRV2085

FILE-TYPE COMPACT DISC PLAYER

# PD-F958 PD-F908

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	Remarks
	PD-F958	PD-F908		
KUXQ	—	O	AC120V	
KCXQ	—	O	AC120V	
KUXQ/CA	O	—	AC120V	

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# 1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.



## WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65



## NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

## REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

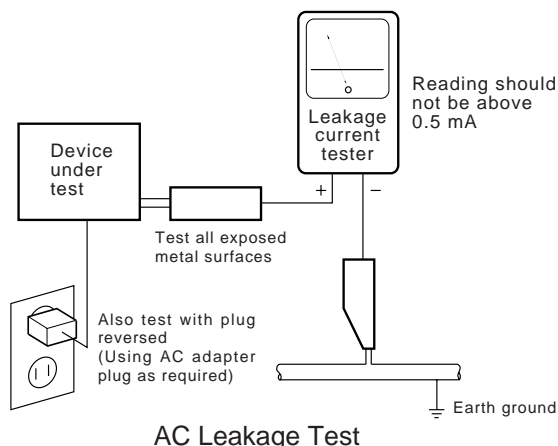
## (FOR USA MODEL ONLY)

### 1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

#### LEAKAGE CURRENT CHECK


Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



**ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.**

### 2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a  on the schematics and on the parts list in this Service Manual.

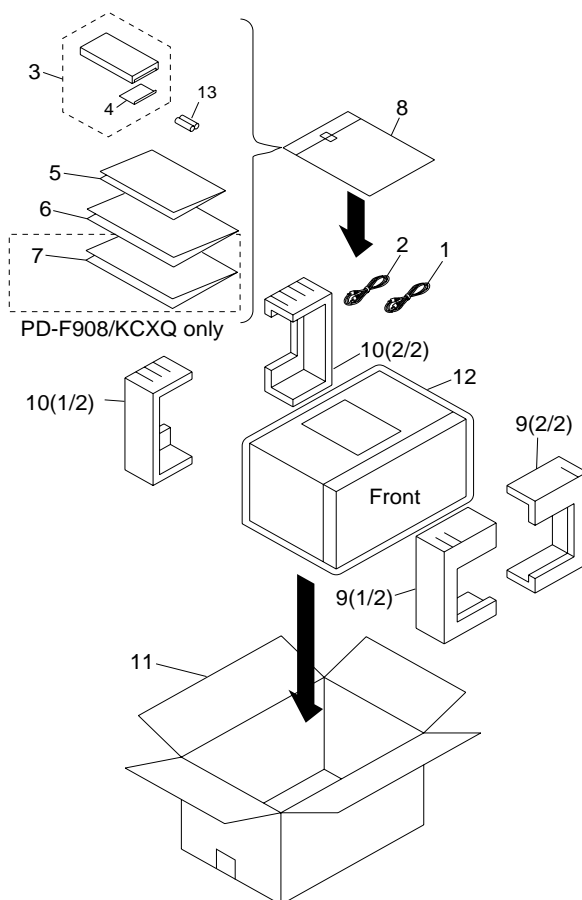
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

## 2. EXPLODED VIEWS AND PARTS LIST

NOTES : ● Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.  
 ● The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part.  
 Therefore, when replacing, be sure to use parts of identical designation.  
 ● Screw adjacent to  $\nabla$  mark on the product are used for disassembly.

### 2.1 PACKING



#### (1) PARTS LIST

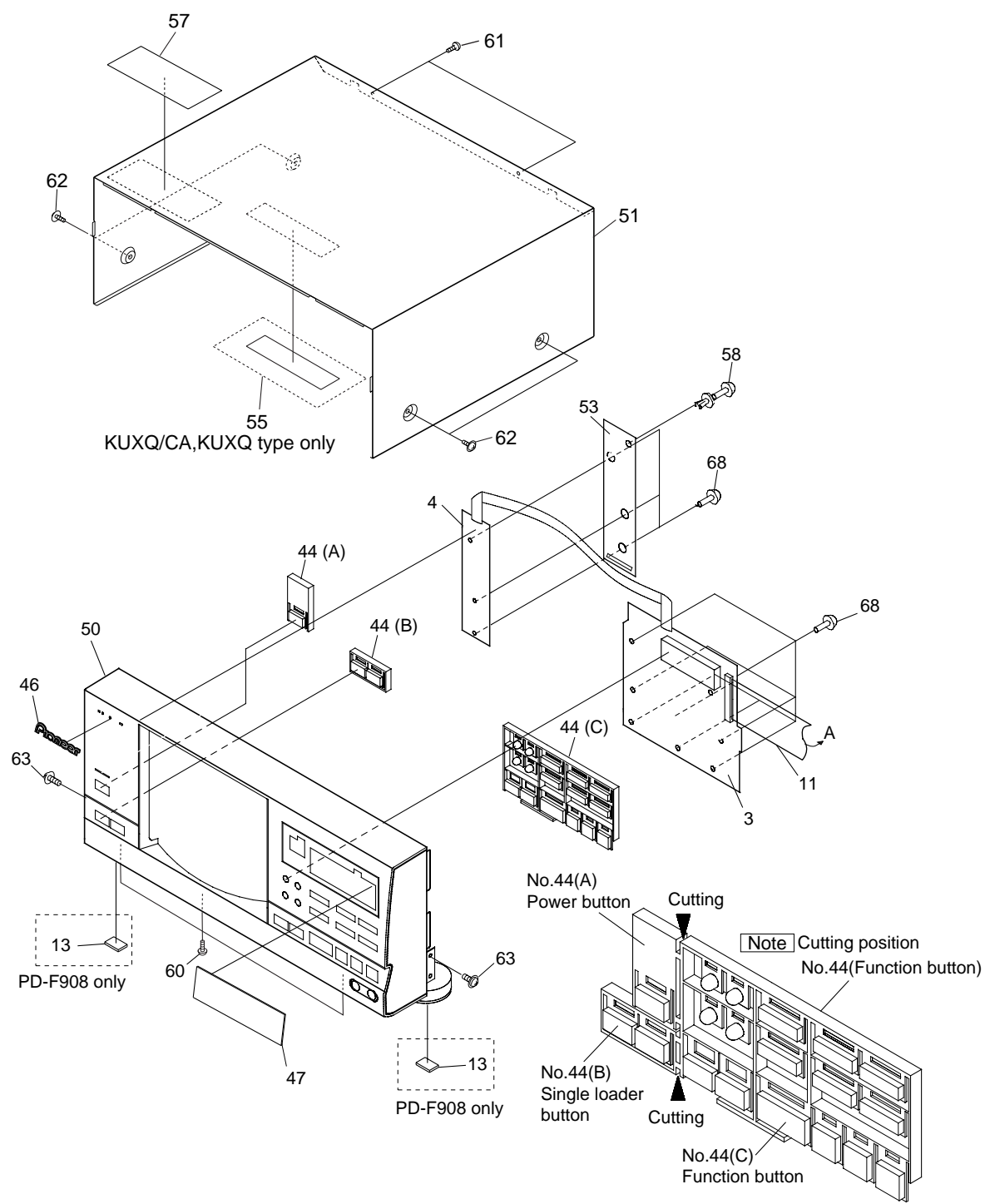
Mark	No.	Description	Part No.
	1	Control Cable (L=1.0m)	PDE1247
	2	Output Cable (L=1.0m)	PDE1248
	3	Remote Control Unit	See Contrast table (2)
	4	Battery Cover	PZN1105
NSP	5	Warranty Card	See Contrast table (2)
	6	Operating Instructions (English)	See Contrast table (2)
	7	Operating Instructions (French))	See Contrast table (2)
	8	Polyethylene Bag	Z21 - 038
	9	Styrol Protector F	PHA1333
	10	Styrol Protector R	PHA1334
	11	Packing Case	See Contrast table (2)
	12	Mirror Mat	PHF1001
NSP	13	Battery (R6P, AA)	VEM 1010

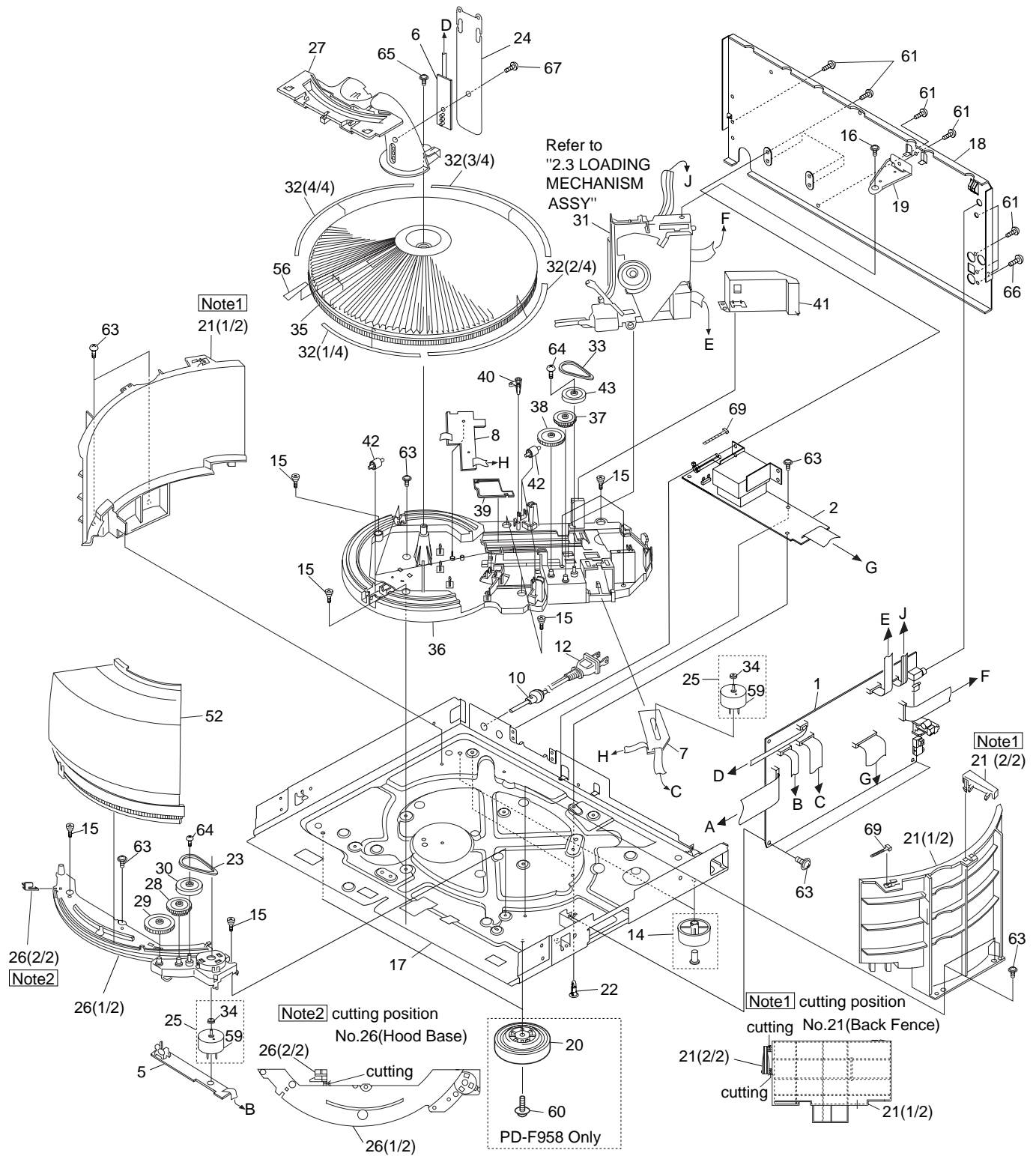
#### (2) CONTRAST TABLE

PD-F908/KUXQ,KCXQ and PD-F958/KUXQ/CA have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.			Remarks
			PD-F958/ KUXQ/CA	PD-F908/ KUXQ	PD-F908/ KCXQ	
NSP	3	Remote Control Unit	PWW1148 (CU-PD101)	PWW1147 (CU-PD100)	PWW1147 (CU-PD100)	
	5	Warranty Card	ARY7023	ARY7023	ARY7024	
	6	Operating Instructions (English)	PRB1278	PRB1277	PRB1277	
	7	Operating Instructions (French)	Not used	Not used	PRD1034	
	11	Packing Case	PHG2337	PHG2334	PHG2335	

2.2 EXTERIOR







## (1) EXTERIOR PARTS LIST

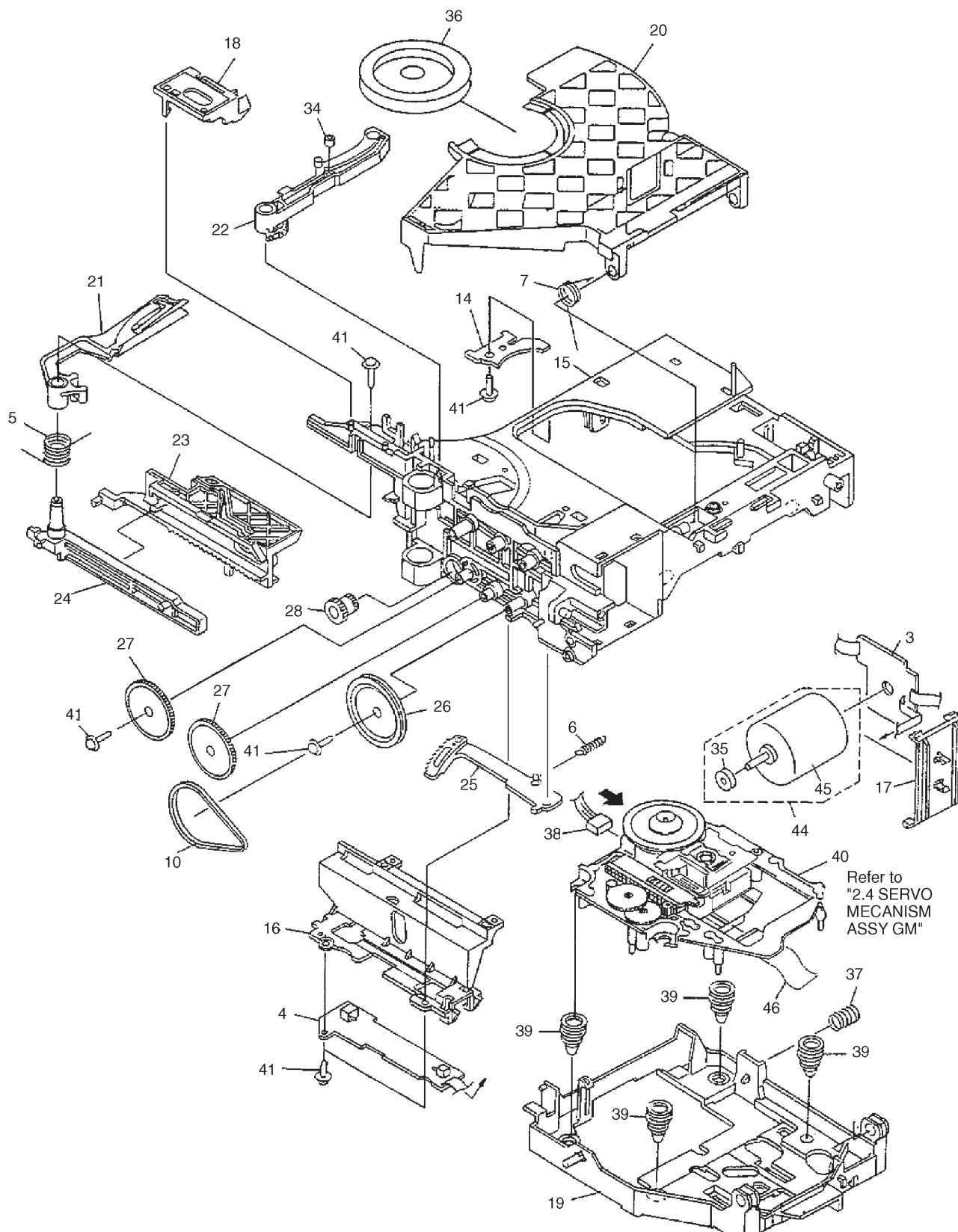
Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Main Board Assy	See Contrast table(2)		36	Mecha Base	PNW2639
	2	Power Board Assy	See Contrast table(2)		37	Gear	PNW2906
	3	Display Board Assy	See Contrast table(2)		38	Gear	PNW2642
NSP	4	Switch Board Assy	See Contrast table(2)		39	Slider	PNW2643
NSP	5	Door Board Assy	See Contrast table(2)		40	Lock Lever	PNW2644
NSP	6	Center LED Board Assy	See Contrast table(2)		41	Mecha Stopper	PNW2646
NSP	7	Select Motor Board Assy	PWZ3324		42	Roller	PNW2647
NSP	8	Sensor Board Assy	PWZ3327		43	Gear Pulley	VNL1662
	9	.....			44	Function Button	See Contrast table(2)
	10	Cord Stopper	CM - 22C		45	.....	
	11	F.F.C/30V	See Contrast table(2)		46	Name Plate	PAM1776
	12	AC Power Cord	PDG1064		47	Display Window	See Contrast table(2)
	13	Rubber Sheet	See Contrast table(2)		48	.....	
	14	Foot Assy	REC1263		49	.....	
	15	Screw C	PBA1106		50	Operation Panel	See Contrast table(2)
	16	Screw	PBA1108		51	Bonnet Case	PYY1191
NSP	17	Under Base	PNA2255		52	Hood	PNW2865
	18	Rear Base	See Contrast table(2)		53	Side Cover	PNM1322
	19	Stopper Angle	PNB1559		54	.....	
	20	Insulator	See Contrast table(2)		55	65 Label	See Contrast table (2)
	21	Back Fence	PNW2671		56	Label	PRW1520
	22	Locking Card Spacer	VEC1596		57	Label	PRW1523
	23	Belt	PEB1288		58	Rivet	RBM-003
	24	Cover	PNM1294		59	Slider Motor	VXM1033
	25	Motor Assy	PEA1333		60	Screw	IBZ30P080FZK
	26	Hood Base	PNW2633		61	Screw	BBZ30P080FZK
	27	Center Pole	PNW2634		62	Screw	FBT40P080FZK
	28	Gear (Middle)	PNW2906		63	Screw	IBZ30P060FMC
	29	Gear (Twin)	PNW2642		64	Screw	IPZ20P080FMC
	30	Gear Pulley	VNL1662		65	Screw	IPZ30P080FCU
	31	Loading Mechanism Assy	PXA1589		66	Screw	PMZ30P060FZK
	32	Rack Label	PAM1783		67	Screw	PPZ30P050FMC
	33	Belt	PEB1288		68	Screw	PPZ30P100FMC
	34	Motor Pulley	PNW1634		69	Binder	ZCA-SKB90BK
	35	Disc Rack	PNW2845				

**(2) CONTRAST TABLE**

PD-F908/KUXQ,KCXQ and PD-F958/KUXQ/CA have the same construction except for the following:

Mark	No.	Symbol & Description	Part No.			Remarks
			PD-F958/ KUXQ/CA	PD-F908/ KUXQ	PD-F908/ KCXQ	
  NSP NSP	1	Main Board Assy	PWZ3895	PWZ3876	PWZ3876	
	2	Power Board Assy	PWZ3900	PWZ3879	PWZ3879	
	3	Display Board Assy	PWZ3904	PWZ3882	PWZ3882	
	4	Switch Board Assy	PWZ3907	PWZ3885	PWZ3885	
	5	Door Board Assy	PWZ3913	PWZ3890	PWZ3890	
NSP	6	Center LED Board Assy	PWZ3915	PWZ3892	PWZ3892	
	11	F.F.C/30V	PDD1186 (40P F.F.C)	PDD1167 (32P F.F.C)	PDD1167 (32P F.F.C)	
	13	Rubber Sheet	Not Used	AEB1111	AEB1111	
	18	Rear Base	PNA2452	PNA2450	PNA2450	
	20	Insulator	PNW2766	Not Used	Not Used	
	44	Function Button	PAC1908	PAC1905	PAC1905	
	47	Display Window	PAM1772	PAM1774	PAM1774	
	50	Operation panel	PNW2869	PNW2867	PNW2867	
	55	65 Label	ORW1069	ORW1069	Not used	

## 2.3 LOADING MECHANISM ASSY

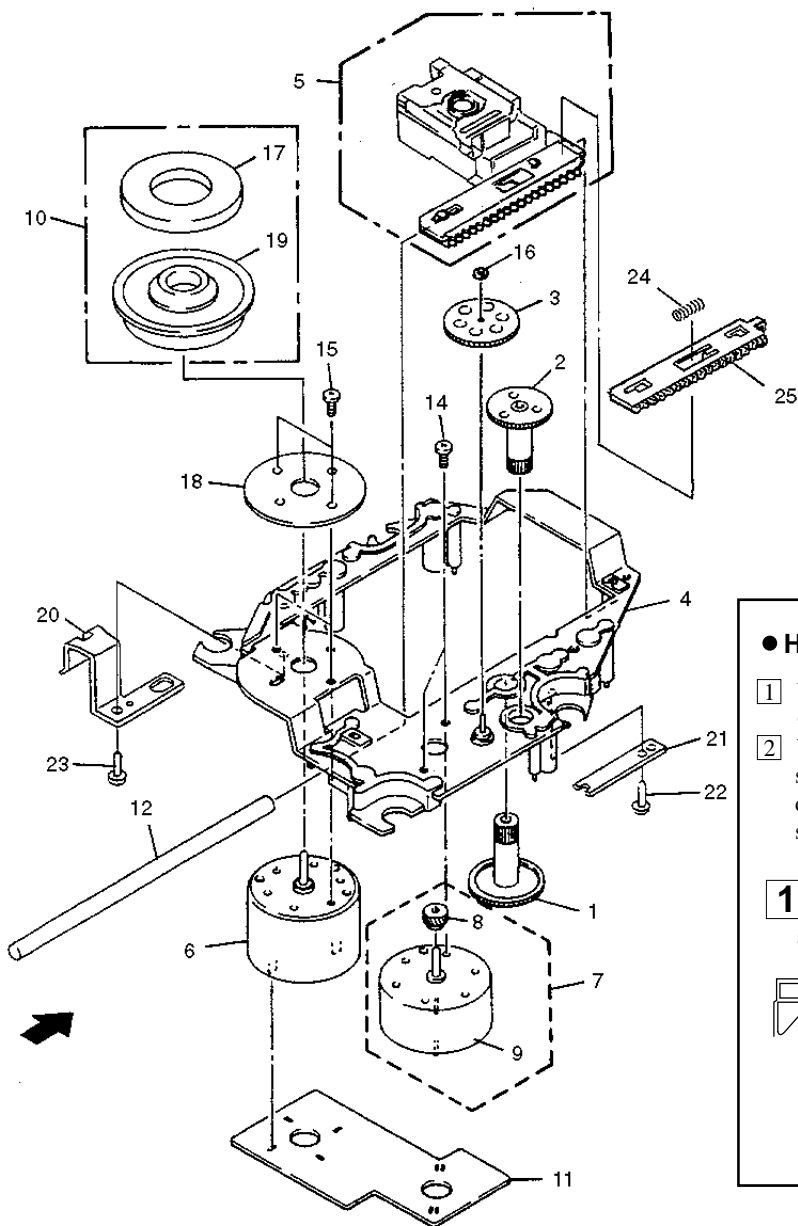




## ■ LOADING MECHANISM ASSY PARTS LIST

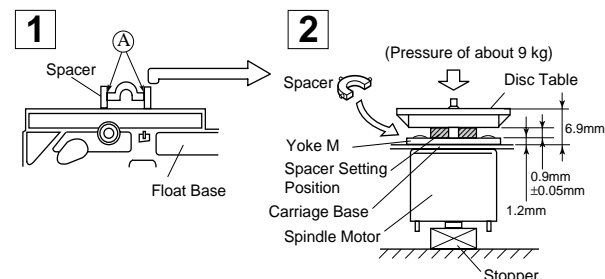
Mark	No.	Description	Part No.
	1	.....	
	2	.....	
NSP	3	Loading Motor Board Assy	PWZ3337
NSP	4	Load SW Board Assy	PWZ3334
	5	Arm A Spring2	ABH7124
	6	Gear Plate Spring	ABH7051
	7	Clamp Spring	ABH7107
	8	.....	
	9	.....	
	10	Loading Belt	AEB7029
	11	.....	
	12	.....	
	13	.....	
NSP	14	Servo Stopper S	ANB7047
	15	Loading Base	ANW7086
	16	Cam Cover	ANW7052
	17	Motor Holder	ANW7053
	18	Sensor Holder	ANW7119
	19	Float Base 96	PNW2700
	20	Clamper Holder	ANW7117
	21	Arm A2	ANW7128
	22	Arm (B)	ANW7058
	23	Drive Plate	ANW7059
	24	Arm Plate	ANW7060
	25	Gear Plate	ANW7111
	26	Gear Pulley (B)	ANW7062
	27	Gear A	ANW7063
	28	Drive Gear	ANW7064
	29	.....	
	30	.....	
	31	.....	
	32	.....	
	33	.....	
	34	Roller B	ANW7075
	35	Motor Pulley	PNW1634
	36	Clamper	PNW2743
	37	Float Spring	ABH7049
	38	Connector Assy (4P)	RDE1043
	39	Float Rubber	AEB7028
NSP	40	Servo Mechanism Assy GM	PXA1591
	41	Screw	IPZ20P080FMC
	42	.....	
	43	.....	
	44	Motor Assy	AEA7006
	45	Loading Motor	VXM1034
	46	16P FFC/30V	PDD1180
		Froil (for Service)	GYA1001
		Ha Narl (for Service)	GEM1016

## 2.4 SERVO MECHANISM ASSY GM



### ● How to Install the Disc Table

- 1 Use nipper or other tool to cut the three sections marked **A** in figure 1. Then remove the spacer
- 2 While supporting the spindle motor shaft with the stopper, put spacer on top of the yoke M, and stick the disc table on top (takes about 9kg pressure). Detach the spacer.



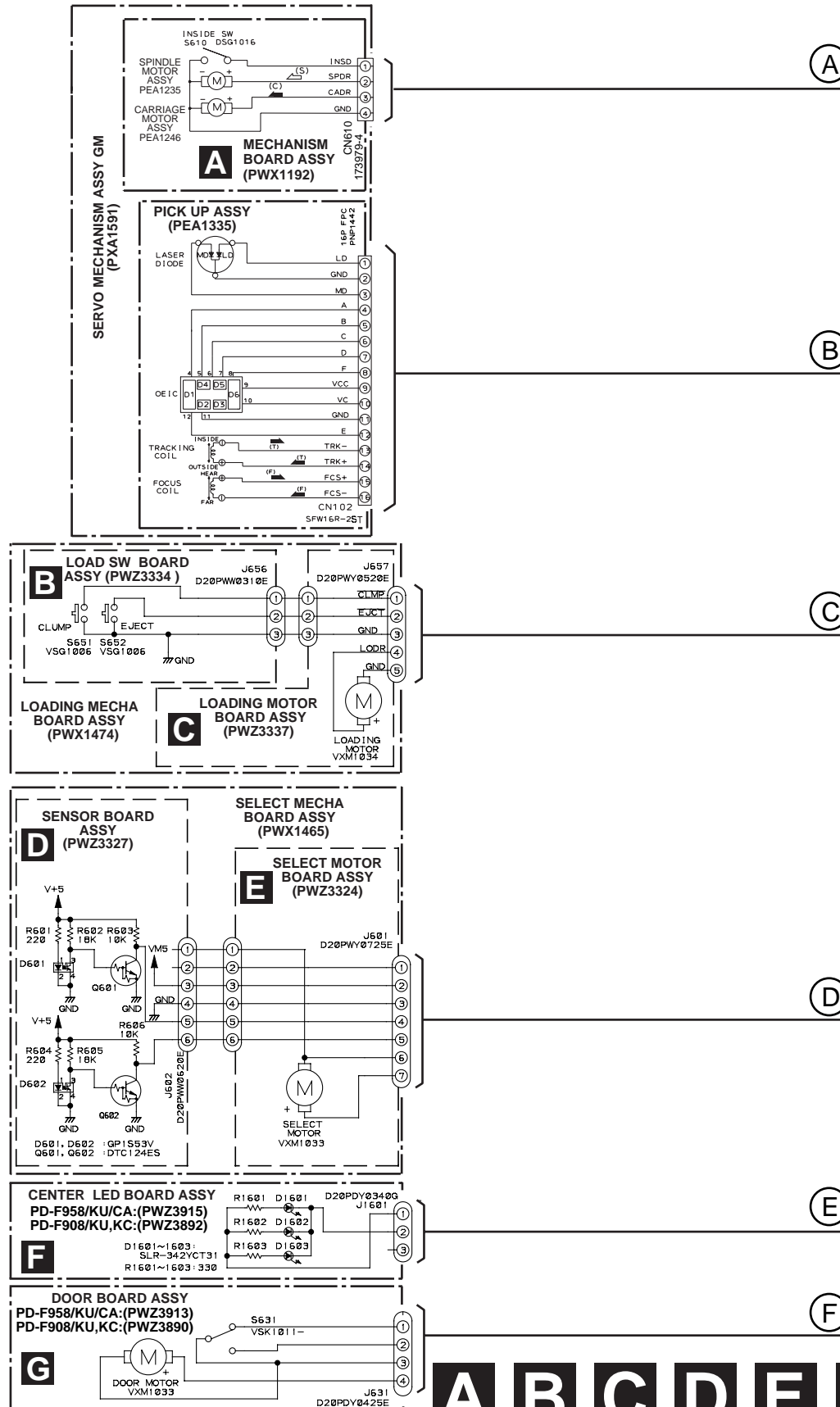
## ■ SERVO MECHANISM ASSY GM PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Gear 1	PNW2052	13	.....	
2	Gear 2	PNW2053	14	Screw	JFZ17P025FZK
3	Gear 3	PNW2054	15	Screw	JFZ20P040FMC
4	Carriage Base	PNW2699	16	Washer	WT12D032D025
5	Pickup Assy - S	PEA1335	17	Clamp Magnet	PMF1014
6	D.C. Motor Assy (SPINDLE)	PEA1235	18	Yoke M	PNB1312
7	Carriage DC Motor Assy	PEA1246	NSP 19	Disc Table	PNW2410
8	Pinion Gear	PNW2055	NSP 20	Float Angle	ANB7020
9	Carriage DC Motor/0.3W	PXM1027			
10	Disc Table Assy	PEA1314	21	Gear Stopper	PNB1303
11	Mechanism Board Assy	PWX1192	22	Screw	BPZ20P060FMC
12	Guide Bar	PLA1094	23	Screw	BPZ26P100FMC
			24	PU Rack Spring	ABH7077
			25	Rack Holder	PNW2056

# 3. SCHEMATIC DIAGRAM

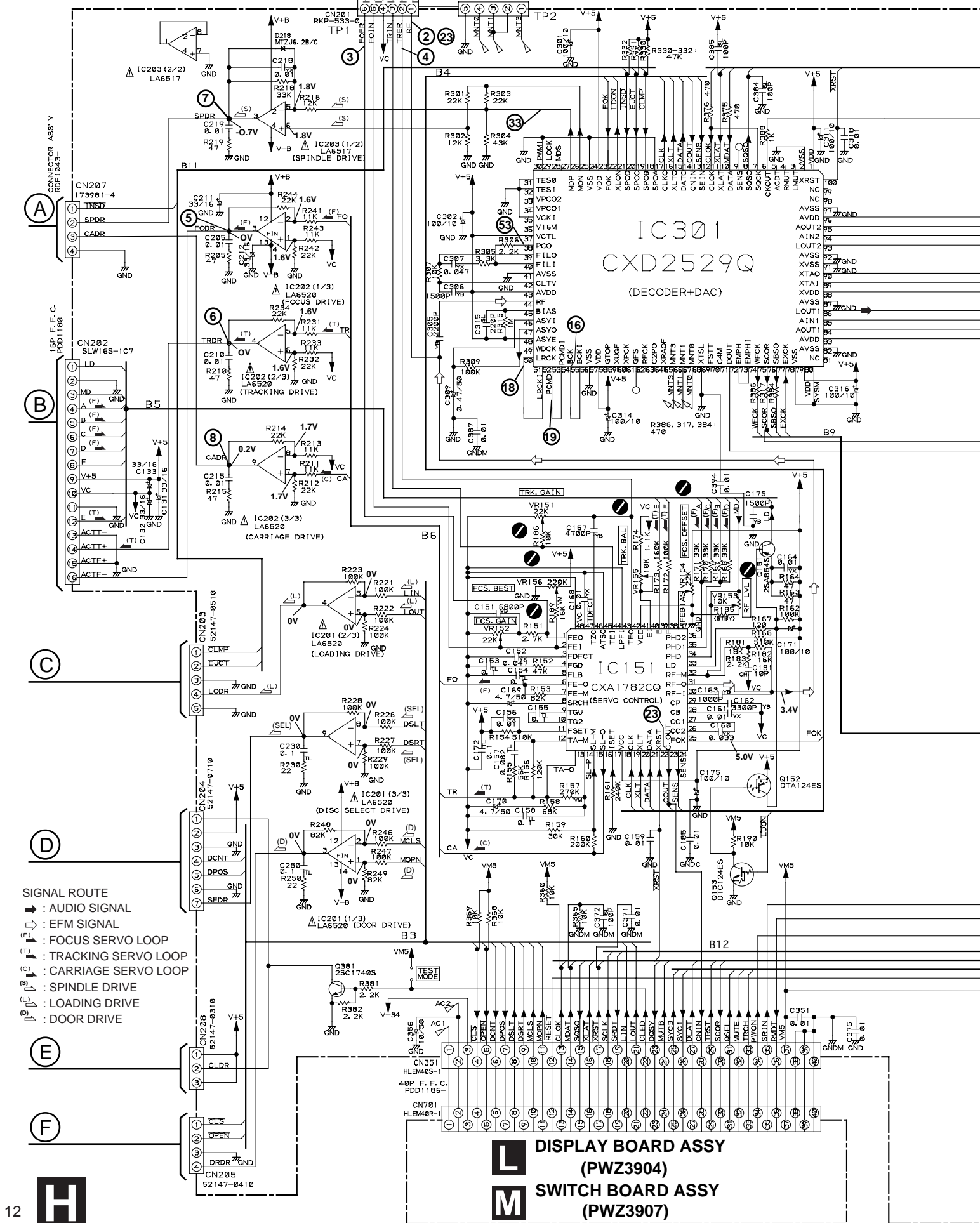
Note: When ordering service parts, be sure to refer to "EXPLODED VIEW AND PARTS LIST" or "PCB PARTS LIST".

## 3.1 MECHANISM BOARD ASSY,SENSOR BOARD ASSY,LOAD SW BOARD ASSY,SELECT MOTOR BOARD ASSY,LOADING MOTOR BOARD ASSY,CENTER LED BOARD ASSY, DOOR BOARD ASSY and PICKUP ASSY



# PD-F958, PD-F908

## 3.2 MAIN BOARD ASSY and POWER BOARD ASSY (FOR PD-F958)



IC301(CXD2529Q) :PLAY MODE

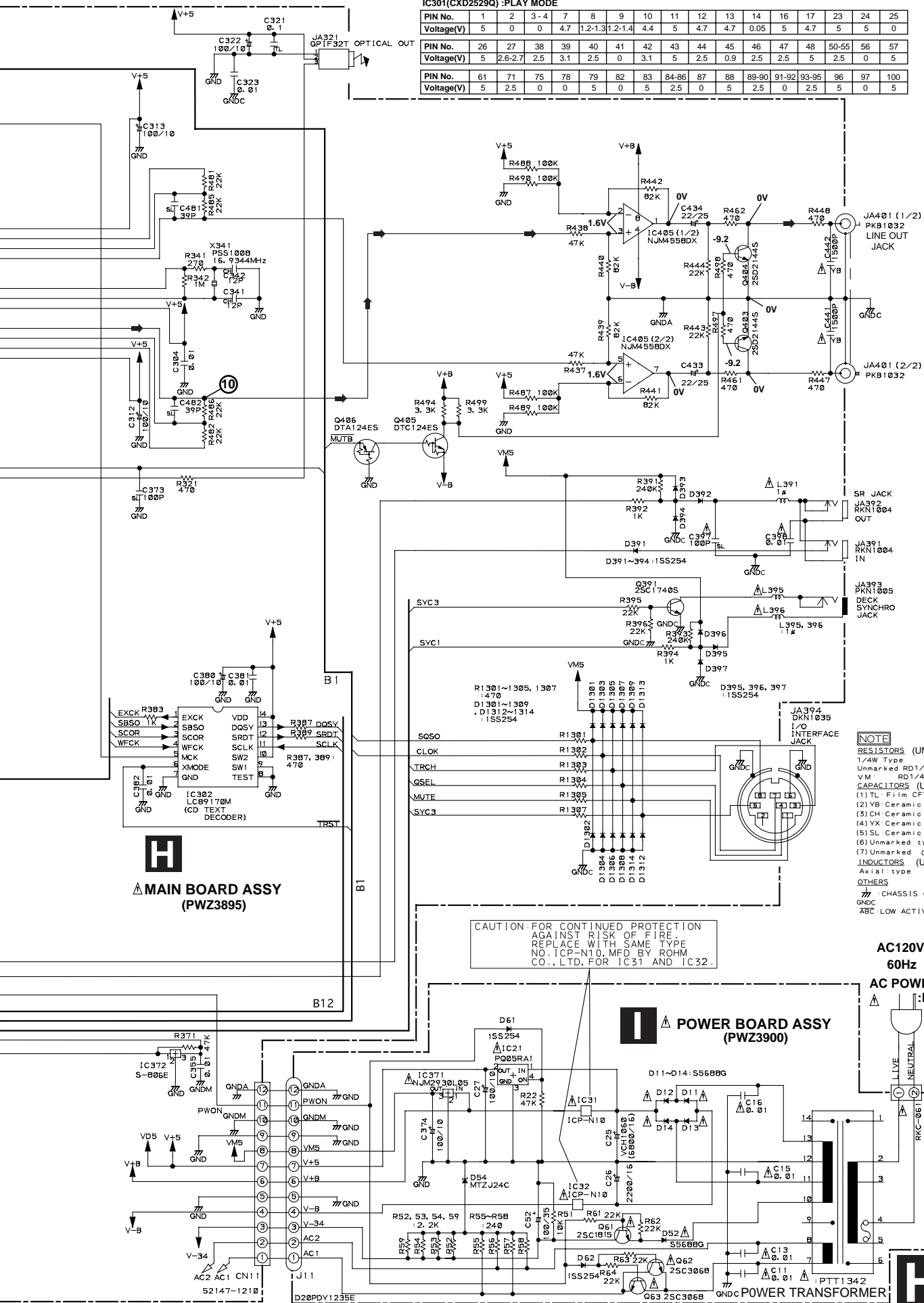
PIN No.	1	2	3-4	7	8	9	10	11	12	13	14	16	17	23	24	25
Voltage(V)	5	0	0	4.7	1.2-1.3	1.2-1.4	4.4	5	4.7	4.7	0.05	5	4.7	5	5	0

PIN No.	26	27	38	39	40	41	42	43	44	45	46	47	48	50-55	56	57
Voltage(V)	5	2.6-2.7	2.5	3.1	2.5	0	3.1	5	2.5	0.9	2.5	2.5	5	2.5	0	5

PIN No.	61	71	75	78	79	82	83	84-86	87	88	89-90	91-92	93-95	96	97	100
Voltage(V)	5	2.5	0	0	5	0	5	2.5	0	5	2.5	0	2.5	5	0	5



**NOTE**

RESISTORS (UNIT: Ω)

1/4W Type

Unmarked RD1/4PU

VM RD1/4VM

CAPACITORS (UNIT: μF)

(1) TL: Film CFTLA

(2) YB: Ceramic CKCYB

(3) CH: Ceramic CCCCH

(4) VK: Ceramic CGCYK

(5) SL: Ceramic CCCSL

(6) Unmarked type CKCYF

(7) Unmarked CEAT

INDUCTORS (UNIT: μH)

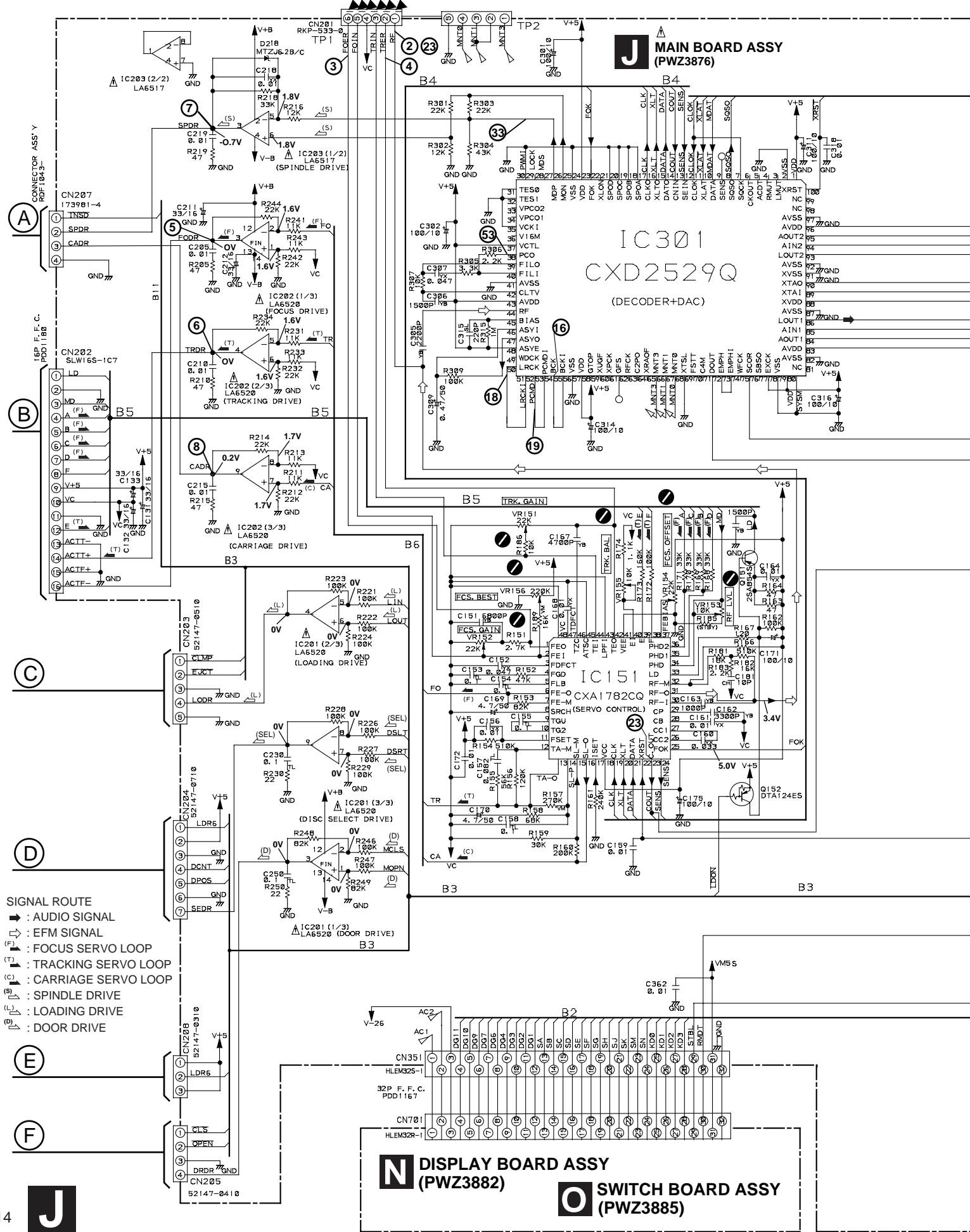
Axial type LAU

OTHERS

CHASSIS GROUND

GND: LOW ACTIVE SIGNAL

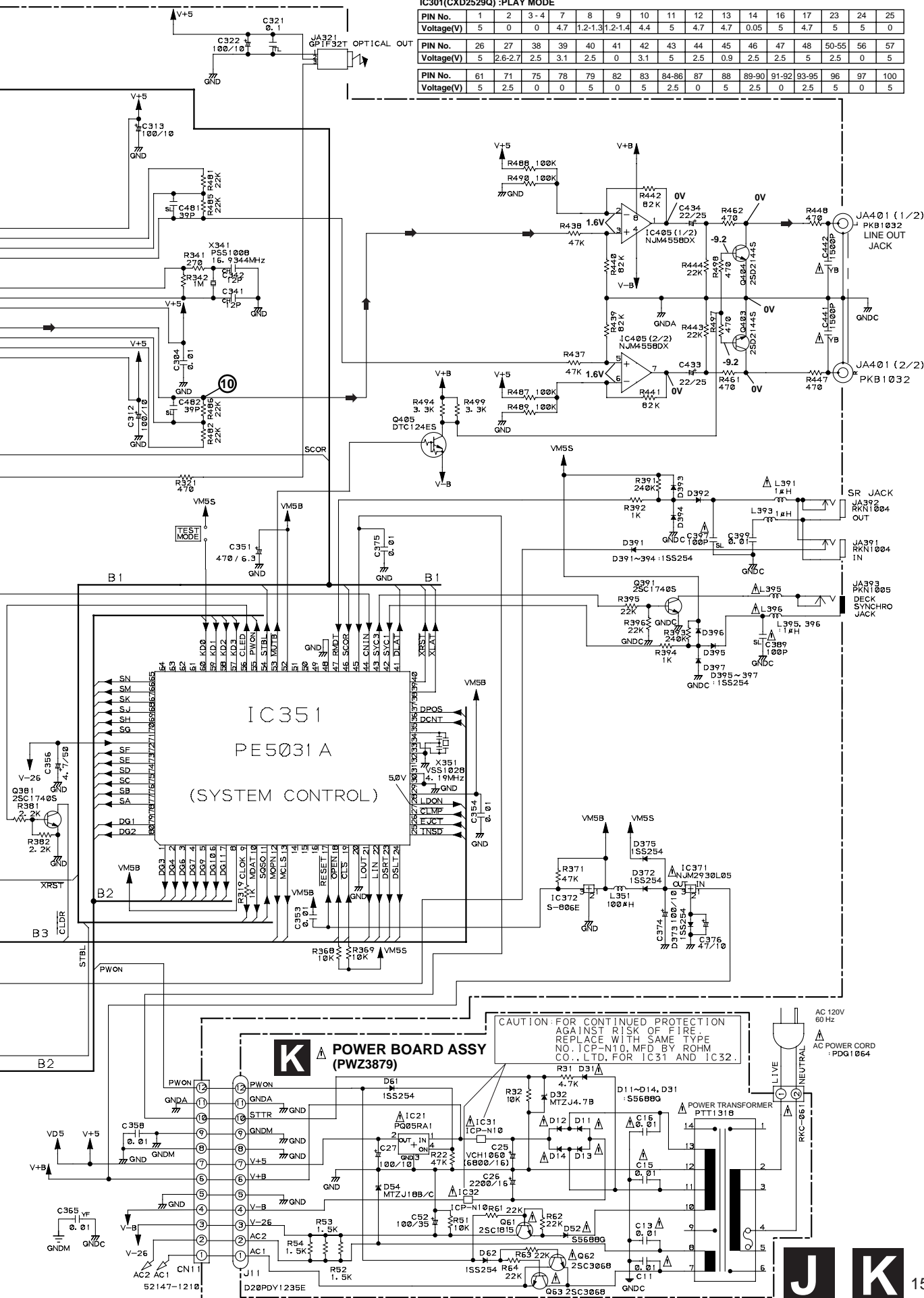
### 3.3 MAIN BOARD ASSY and POWER BOARD ASSY (FOR PD-F908)





## IC301(CXD2529Q) :PLAY MODE

PIN No.	1	2	3-4	7	8	9	10	11	12	13	14	16	17	23	24	25
Voltage(V)	5	0	0	4.7	1.2-1.3	1.2-1.4	4.4	5	4.7	4.7	0.05	5	4.7	5	5	0
PIN No.	26	27	38	39	40	41	42	43	44	45	46	47	48	50-55	56	57
Voltage(V)	5	2.6-2.7	2.5	3.1	2.5	0	3.1	5	2.5	0.9	2.5	2.5	5	2.5	0	5
PIN No.	61	71	75	78	79	82	83	84-86	87	88	89-90	91-92	93-95	96	97	100
Voltage(V)	5	2.5	0	0	5	0	5	2.5	0	5	2.5	0	2.5	5	0	5



A

B

C

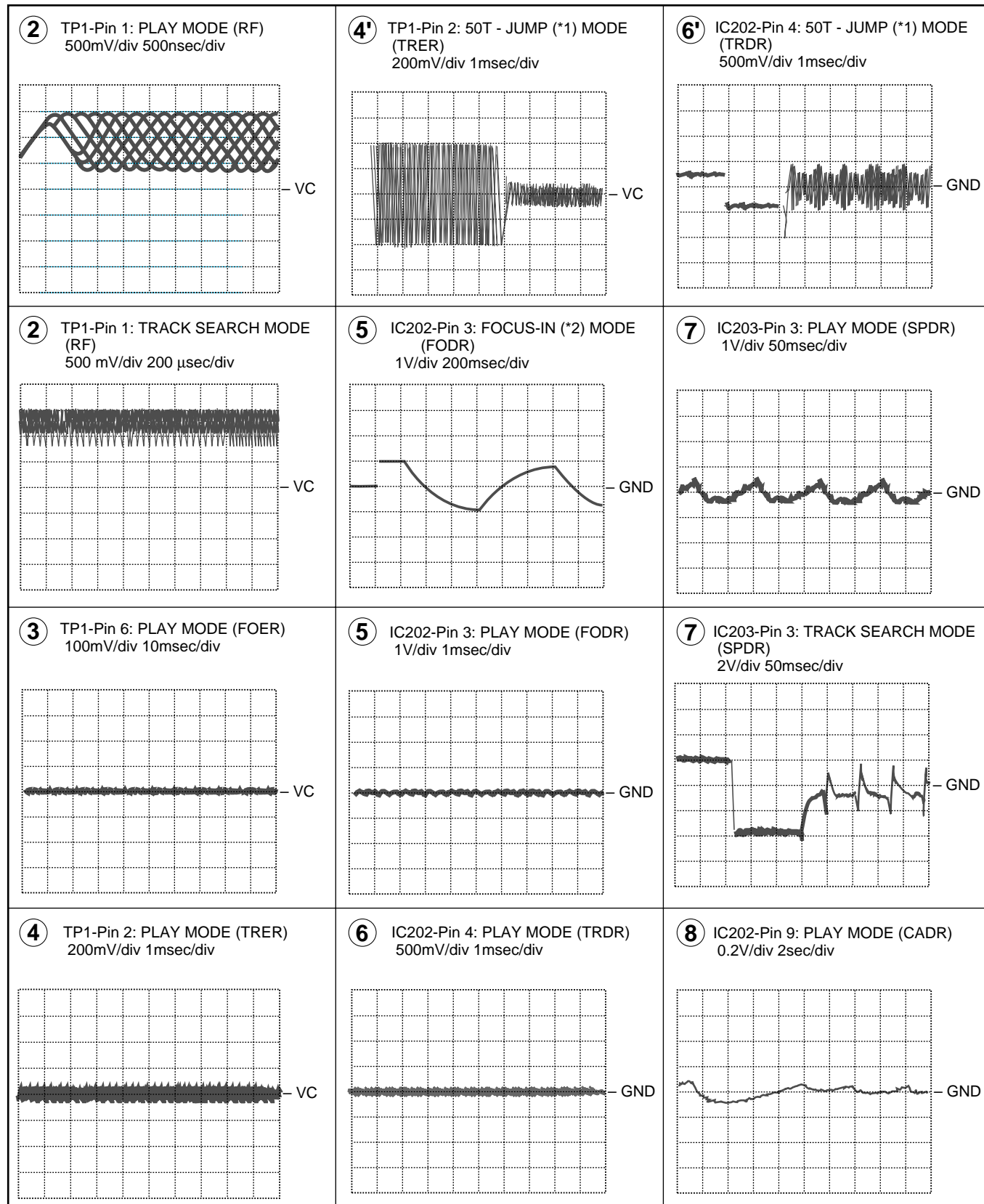
D

## Waveforms ( H , J )

Note: The encircled numbers denote measuring point in the schematic diagram.

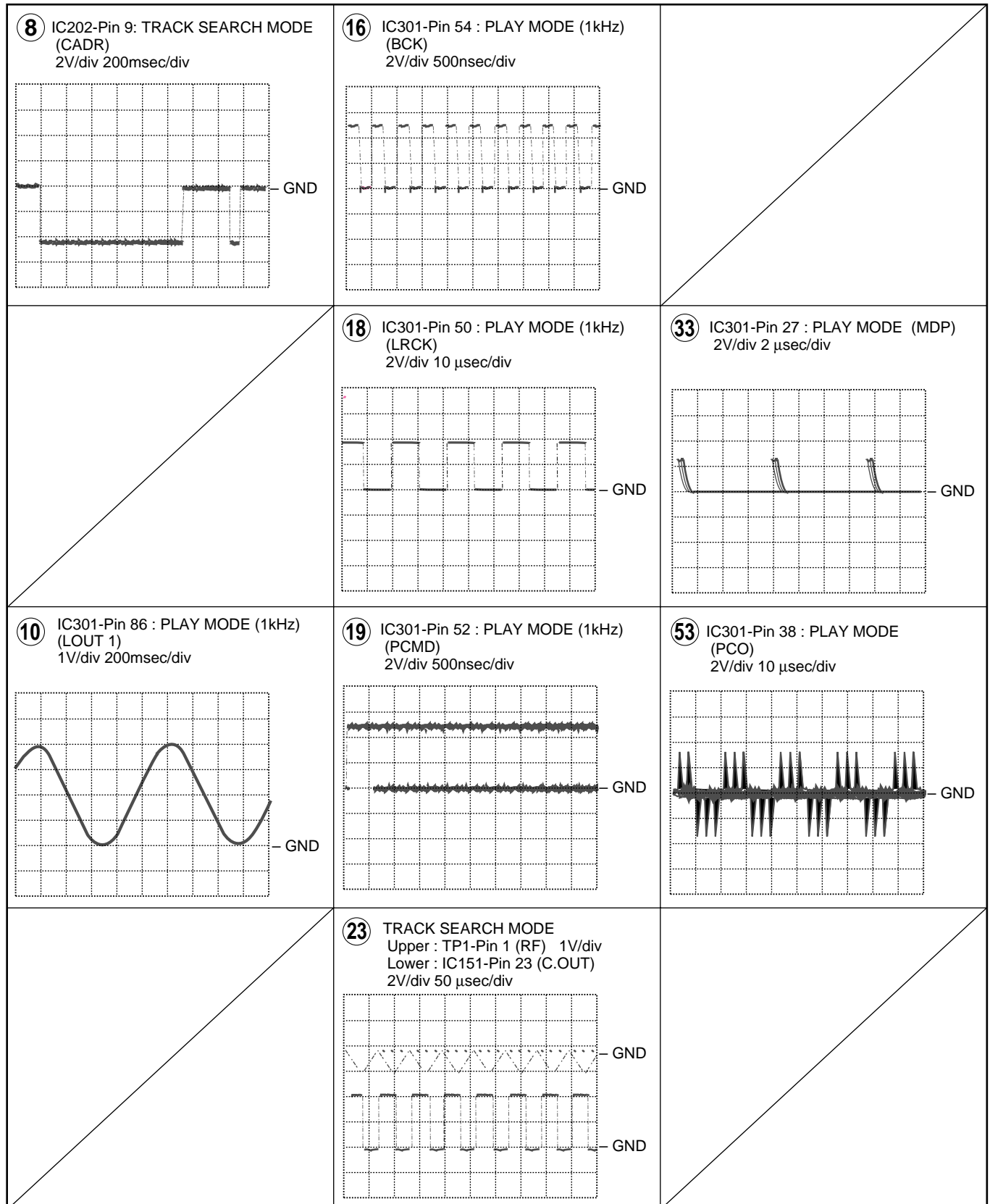
\*1 50T-JUMP: After switching to the pause mode, press the manual search key.

\*2 FOCUS-IN: Press the play key without loading a disc.





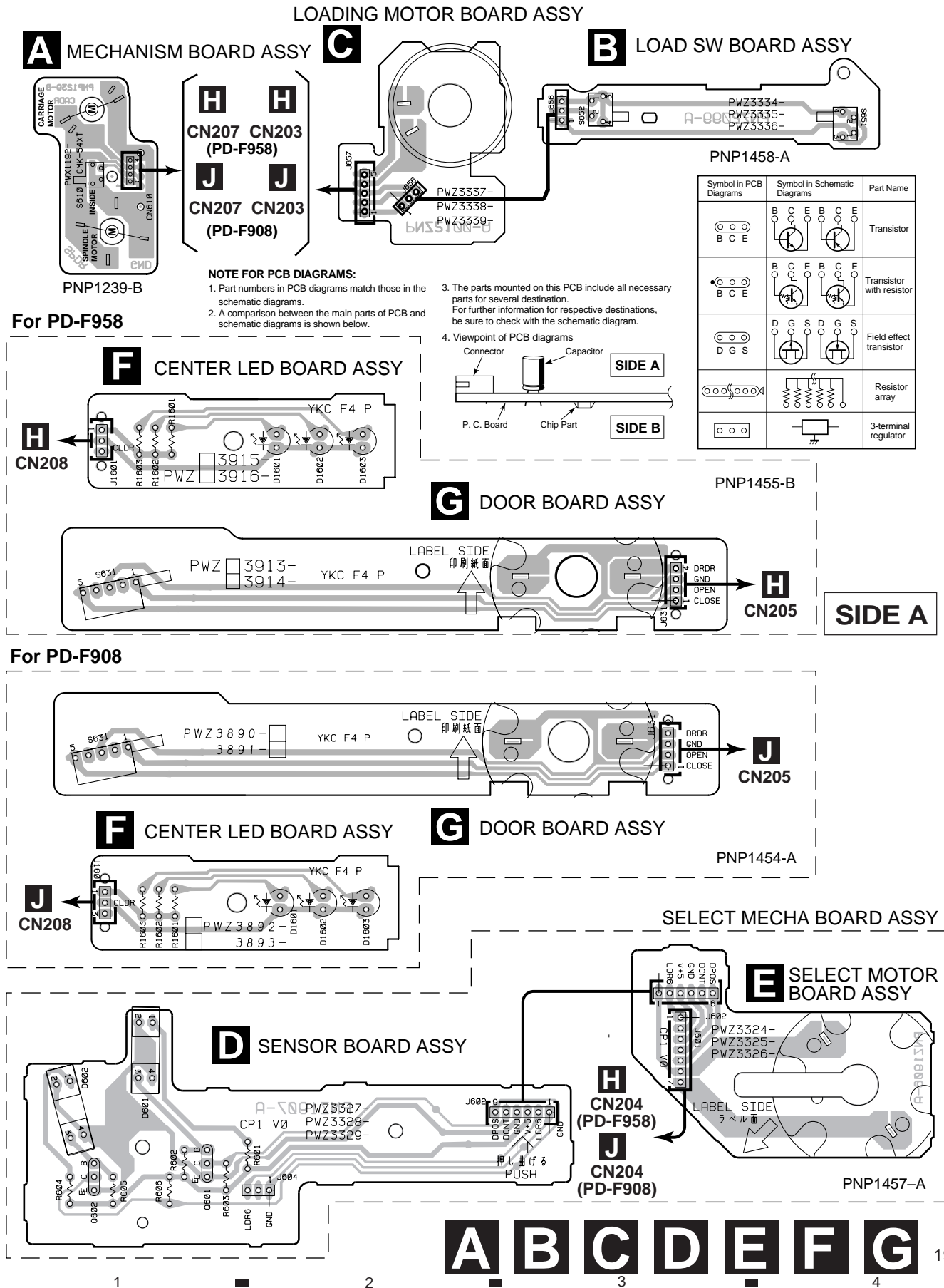
## Waveforms





## 4. PCB CONNECTION DIAGRAM

### 4.1 MECHANISM BOARD ASSY, SENSOR BOARD ASSY, LOAD SW BOARD ASSY, SELECT MOTOR BOARD ASSY, LOADING MOTOR BOARD ASSY, CENTER LED BOARD ASSY and DOOR BOARD ASSY



# PD-F958, PD-F908

## 4.2 MAIN BOARD ASSY (FOR PD-F958)



MAIN BOARD ASSY

To PICKUP ASSY

SIDE A

A  
CN610

I  
J11

B  
C  
J657

E  
J601

F  
J1601

G  
J631

D  
L  
CN701

VR152 VR156 VR151 VR155 VR154  
IC151 Q152 Q151  
Q405 Q406 Q404  
Q452 Q451 Q454 IC406 Q453 Q403  
IC401  
IC202 IC203 Q321  
Q153 IC301  
Q381 IC201  
IC372  
Q391  
Q404  
Q405  
Q406  
Q451  
Q452  
Q453  
Q403

PNP1455-B

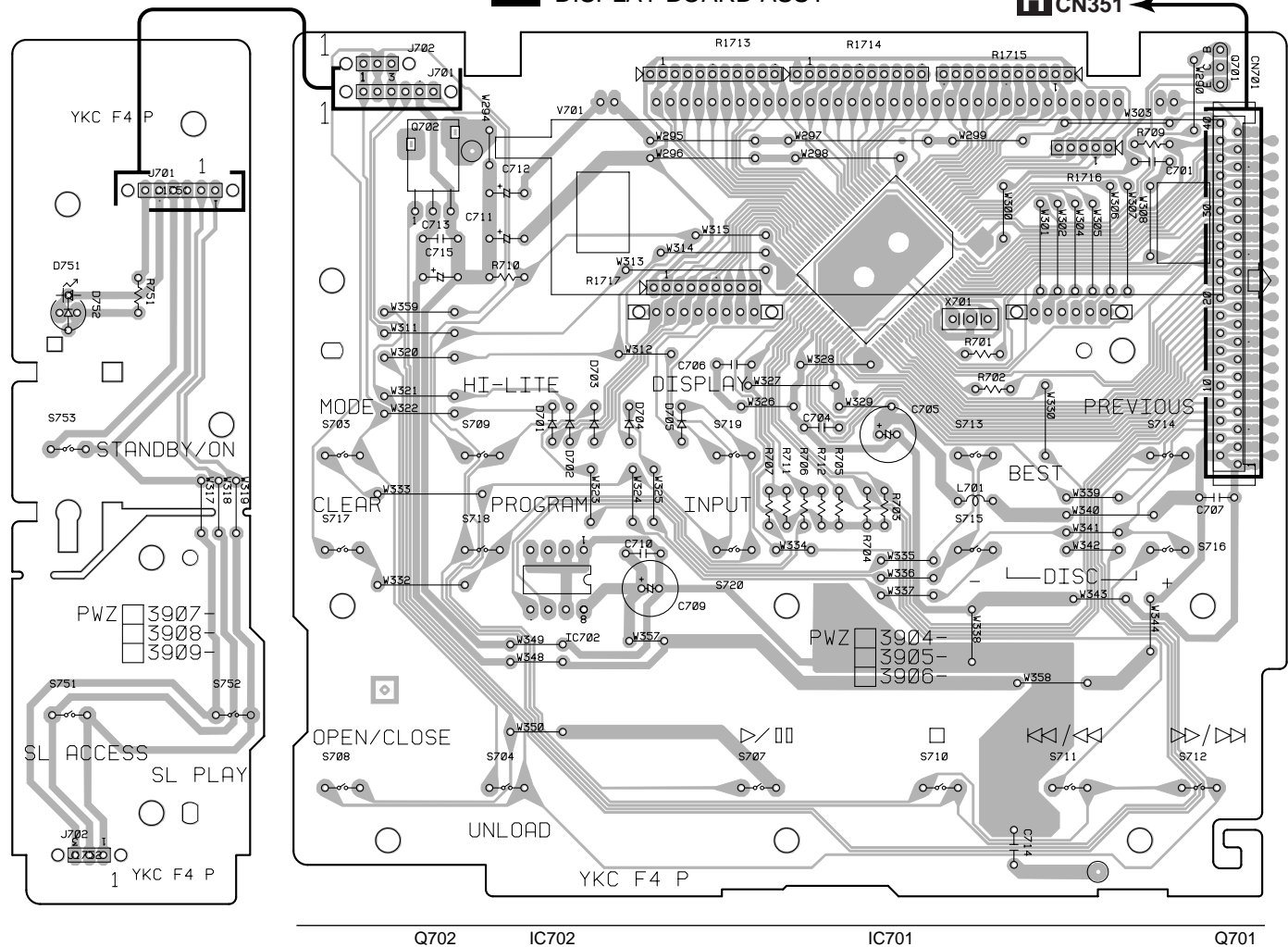


### 4.3 DISPLAY BOARD ASSY, SWITCH BOARD ASSY and POWER BOARD ASSY (FOR PD-F958)

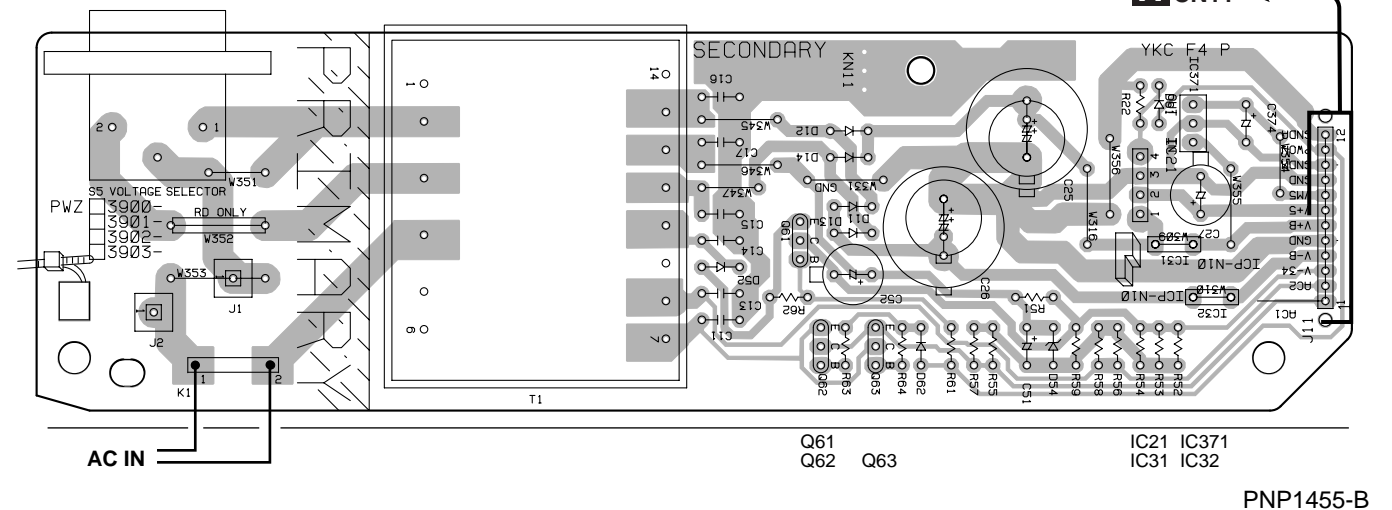
## SIDE A

**M** SWITCH BOARD  
ASSY

**L** DISPLAY BOARD ASSY

**H** CN351

**I** POWER BOARD ASSY

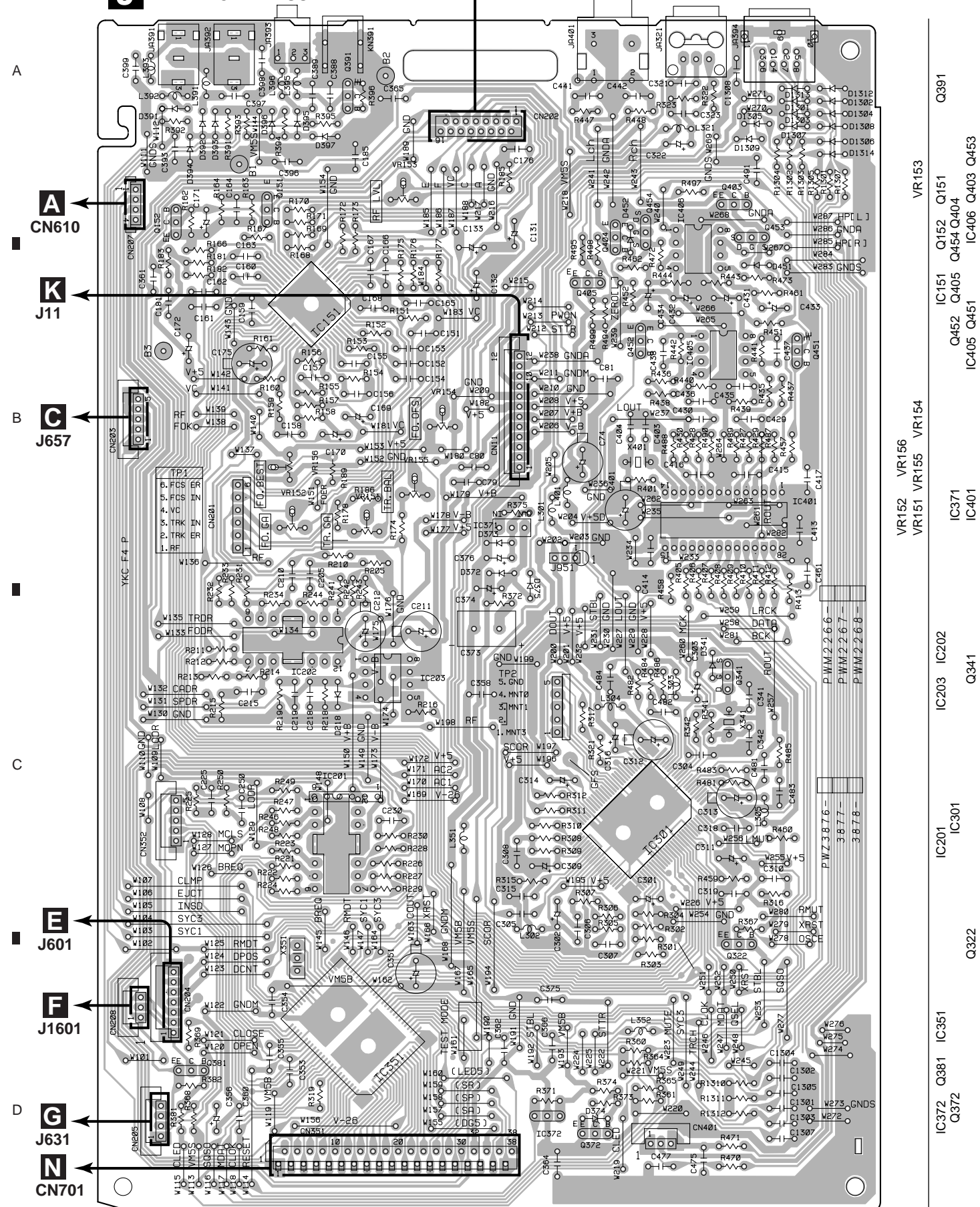
**H** CN11

PNP1455-B

## MAIN BOARD ASSY

### To PICKUP ASSY

## SIDE A



PNP1454-A



## 5. PCB PARTS LIST

- NOTES :
- Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
  - The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
  - When ordering resistors, first convert resistance values into code form as shown in the following examples.
- Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by  $J = 5\%$ , and  $K = 10\%$ ).
- 560  $\Omega \rightarrow 56 \times 10^1 \rightarrow 561$  ..... RD1/4PU  $\begin{matrix} 5 & 6 & 1 \\ \hline \end{matrix} J$
- 47k  $\Omega \rightarrow 47 \times 10^3 \rightarrow 473$  ..... RD1/4PU  $\begin{matrix} 4 & 7 & 3 \\ \hline \end{matrix} J$
- 0.5  $\Omega \rightarrow R50$  ..... RN2H  $\begin{matrix} R & 5 & 0 \\ \hline \end{matrix} K$
- 1  $\Omega \rightarrow 1R0$  ..... RS1P  $\begin{matrix} 1 & R & 0 \\ \hline \end{matrix} K$
- Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
- 5.62k  $\Omega \rightarrow 562 \times 10^1 \rightarrow 5621$  ..... RN1/4PC  $\begin{matrix} 5 & 6 & 2 & 1 \\ \hline \end{matrix} F$

### ■ LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.			Remarks
		PD-F958/ KU/CA	PD-F908/ KU	PD-F908/ KC	
NSP	MOTHER BOARD ASSY	PWM2269	PWM2266	PWM2266	
$\triangle$	└ MAIN BOARD ASSY	PWZ3895	PWZ3876	PWZ3876	
$\triangle$	└ POWER BOARD ASSY	PWZ3900	PWZ3879	PWZ3879	
	└ DISPLAY BOARD ASSY	PWZ3904	PWZ3882	PWZ3882	
NSP	└ SWITCH BOARD ASSY	PWZ3907	PWZ3885	PWZ3885	
NSP	└ DOOR BOARD ASSY	PWZ3913	PWZ3890	PWZ3890	
NSP	└ CENTER LED ASSY	PWZ3915	PWZ3892	PWZ3892	
NSP	SELECT MECHA BOARD ASSY	PWX1465	PWX1465	PWX1465	
NSP	└ SELECT MOTOR BOARD ASSY	PWZ3324	PWZ3324	PWZ3324	
NSP	└ SENSOR BOARD ASSY	PWZ3327	PWZ3327	PWZ3327	
NSP	LOADING MECHANISM ASSY	PXA1589	PXA1589	PXA1589	
NSP	└ LOADING MECHA BOARD ASSY	PWX1474	PWX1474	PWX1474	
NSP	└ LOAD SW BOARD ASSY	PWZ3334	PWZ3334	PWZ3334	
NSP	└ LOADING MOTOR BOARD ASSY	PWZ3337	PWZ3337	PWZ3337	
NSP	SERVO MECHANISM ASSY GM	PXA1591	PXA1591	PXA1591	
	└ MECHANISM BOARD ASSY	PWX1192	PWX1192	PWX1192	

### ■ CONTRAST OF PCB ASSEMBLIES

#### SWITCH BOARD Assy

Although PWZ3907 and PWZ3885 are different in part number, they consist of the same components.

#### DOOR BOARD Assy

Although PWZ3913 and PWZ3890 are different in part number, they consist of the same components.

#### CENTER LED BOARD Assy

Although PWZ3915 and PWZ3892 are different in part number, they consist of the same components.



## ■ PARTS LIST FOR PD-F958/KU/CA

Mark No. Description Part No.



### MAIN BOARD ASSY (PWZ3895)

#### SEMICONDUCTORS

	IC151	CXA1782CQ
	IC301	CXD2529Q
⚠	IC203	LA6517
⚠	IC201, IC202	LA6520
	IC302	LC89170M
	IC372	S-806E
	IC405	NJM4558DX
	Q151	2SA854S
	Q381, Q391	2SC1740S
	Q403, Q404	2SD2144S
	Q152, Q406	DTA124ES
	Q153, Q321, Q405	DTC124ES
	D1301–D1309, D1312–D1314, D321	1SS254
	D341, D391–D397	1SS254
	D218	MTZJ6.2B

#### COILS AND FILTERS

L391, L395, L396	LAU1R0J
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#### CAPACITORS

C181	CCCCH100D50
C341, C342	CCCCH120J50
C372, C373, C384, C385, C397	CCCSL101J50
C315	CCCSL221J50
C481, C482	CCCSL390J50
C356	CEAT100M50
C171, C175, C301, C302	CEAT101M10
C311–C314, C316, C322, C380	CEAT101M10
C433, C434	CEAT220M25
C131–C133, C211, C212	CEAT330M16
C169, C170	CEAT4R7M50
C309	CEATR47M50
C153–C155, C158, C172, C230	CFTLA104J50
C250, C321	CFTLA104J50
C157	CFTLA823J50
C156, C161, C164, C168, C218	CGCYX103K25
C160	CGCYX333K25
C152, C307	CGCYX473K25
C163	CKCYB102K50
C176, C306, C441, C442	CKCYB152K50
C305	CKCYB222K50
C162	CKCYB332K50
C167	CKCYB472K50
C151	CKCYB682K50
C159, C185, C205, C210, C215	CKCYF103Z50
C219, C304, C318, C323, C351	CKCYF103Z50
C355, C371, C375	CKCYF103Z50
C381, C382, C387, C394, C398	CKCYF103Z50

#### RESISTORS

R189	RD1/4VM163J
R157	RD1/4VM274J
VR153, VR155 (10k Ω)	VCP1156
VR151, VR152, VR154 (22k Ω)	VCP1158
VR156 (220k Ω)	VCP1164

Mark No. Description Part No.

Other Resistors

RD1/4PU□□□J

#### OTHERS

CN207	MT 4P CONNECTOR	173981-4
CN208	3P JUMPER CONNECTOR	52147-0310
CN205	4P JUMPER CONNECTOR	52147-0410
CN203	5P JUMPER CONNECTOR	52147-0510
CN204	7P JUMPER CONNECTOR	52147-0710
CN11	12P JUMPER CONNECTOR	52147-1210
JA394	I/O INTERFACE JACK	DKN1035
JA321	OPTICAL LINK OUT	GP1F32T
CN351	FFC CONNECTOR 40P	HLEM40S-1
JA401	2P JACK	PKB1032
JA393	JACK	PKN1005
X341	X TAL.RES.(16.9344MHz)	PSS1008
JA391, JA392	JACK	RKN1004
CN201	CONNECTOR 6P	RKP-533
CN202	FFC CONNECTOR	SLW16S-1C7

SCREW PLATE

VNE1948

## I POWER BOARD ASSY (PWZ3900)

#### SEMICONDUCTORS

⚠	IC31, IC32	ICP-N10
⚠	IC37	NJM2930L05
⚠	IC21	PQ05RA1
⚠	Q61	2SC1815
⚠	Q62, Q63	2SC3068
	D54	MTZJ24B
⚠	D11–D14, D52	S5688G
	D61, D62	1SS254

#### CAPACITORS

C27, C374	CEAT101M10
C52	CEAT101M35
C26	CEAT222M16
C11, C13, C15, C16	CKCYF103Z50
C25 (6800 μF/16V)	VCH1060

#### RESISTORS

All Resistors

RD1/4PU□□□J

#### OTHERS

	12P CABLE HOLDER	51048-1200
J11	JUMPER WIRE	D20PDY1235E
⚠	POWER TRANSFORMER	PTT1342
⚠	TERMINAL	RKC-061

## L DISPLAY BOARD ASSY (PWZ3904)

#### SEMICONDUCTORS

IC701	PE5032A
IC702	S-24C16ADP
Q701	DTC124ES
D701–D705	1SS254

#### COILS AND FILTERS

L701	AXIAL INDUCTOR	LAU101J
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## PD-F958, PD-F908

Mark	No.	Description	Part No.
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### SWITCHES

S703, S704, S707– S720

VSG1009

### CAPACITORS

C712

CEAT100M50

C705, C709

CEAT101M6R3

C711

CEAT4R7M50

C708, C713

CKCYF103Z50

C701, C704, C706, C707

CKPUYY103M16

### RESISTORS

All Resistors

RD1/4PU□□□J

### OTHERS

6P CABLE HOLDER

51048-0600

8P CABLE HOLDER

51048-0800

CN701 FFC CONNECTOR 40P

HLEM40R-1

V701 FL INDICATOR TUBE

PEL1095

X701 CERAMIC RES.(4.19MHz)

VSS1028

J701 JUMPER WIRE 6P

D20PDD0635E

REMOTE RECEIVER UNIT

GP1U27X

## M SWITCH BOARD ASSY

### SWITCHES AND RELAYS

S751– S753

VSG1009

### OTHER

6P CABLE HOLDER

51048-0600

## G DOOR BOARD ASSY

### OTHERS

4P CABLE HOLDER

51048-0400

REAF SWITCH

VSK1011

JUMPER WIRE

D20PDY0425E

## F CENTER LED BOARD ASSY

### SEMICONDUCTORS

D1601– D1603

SLR-342YCT31

### RESISTORS

All Resistors

RD1/4PU□□□J

### OTHERS

3P CABLE HOLDER

51048-0300

J1601 JUMPER WIRE

D20PDY0340G

## E SELECT MOTOR BOARD ASSY

### OTHER

J601 JUMPER WIRE

D20PWY0725E

## D SENSOR BOARD ASSY

### SEMICONDUCTORS

Q601, Q602

DTC124ES

D601, D602

GP1S53V

### RESISTORS

All Resistors

RD1/4PU□□□J

Mark	No.	Description	Part No.
------	-----	-------------	----------

### OTHER

J602 JUMPER WIRE

D20PWW0620E

## B LOAD SW BOARD ASSY

### SWITCHES AND RELAYS

S651, S652

VSG1006

### OTHER

J656 3P JUMPER WIRE

D20PWW0310E

## C LOADING MOTOR BOARD ASSY

### OTHER

J657 5P JUMPER WIRE

D20PWY0520E

## A MECHANISM BOARD ASSY

### SWITCHE

S610

DSG1016

### OTHER

CN610 MT 4P CONNECTOR

173979-4

## ■ PARTS LIST FOR PD-F908/KU/KC

Mark	No.	Description	Part No.
------	-----	-------------	----------

### J MAIN BOARD ASSY(PWZ3876)

#### SEMICONDUCTORS

	IC151	CXA1782CQ
	IC301	CXD2529Q
⚠	IC203	LA6517
⚠	IC201, IC202	LA6520
⚠	IC371	NJM2930L05

	IC405	NJM4558DX
	IC372	S-806E
	IC351	PE5031A
	Q151	2SA854S
	Q381, Q391	2SC1740S

	Q403, Q404	2SD2144S
	Q152,	DTA124ES
	Q405	DTC124ES
	D372, D373, D375, D391– D397	1SS254
	D218	MTZJ6.2B

#### COILS AND FILTERS

	L391, L395, L396, L393	LAU1R0J
	L351 AXIAL INDUCTOR	LAU101J

#### CAPACITORS

	C181	CCCCH100D50
	C341, C342	CCCCH120J50
	C389, C397	CCCSL101J50
	C315	CCCSL221J50
	C481, C482	CCCSL390J50

	C171, C175, C301, C302	CEAS101M10
	C311– C314, C316, C322, C374	CEAS101M10
	C73	CEAS101M10
	C371	CEAS1R0M50
	C433, C434	CEAS220M25

	C131– C133, C211, C212	CEAS330M16
	C376	CEAS470M10
	C351	CEAS471M6R3
	C169, C170, C356	CEAS4R7M50
	C309	CEASR47M50

	C153 – C155, C158, C230	CFTXA104J50
	C250, C321	CFTXA104J50
	C157	CFTXA823J50
	C156, C161, C164, C168, C218	CGCYX103K25
	C160	CGCYX333K25

	C152, C307	CGCYX473K25
	C163	CKCYB102K50
	C176, C306, C441, C442	CKCYB152K50
	C305	CKCYB222K50
	C162	CKCYB332K50

	C167	CKCYB472K50
	C151	CKCYB682K50
	C159, C172, C205, C210, C215	CKCYF103Z50
	C219, C304, C318, C353	CKCYF103Z50
	C354, C358, C362, C365, C366	CKCYF103Z50

	C375, C399	CKCYF103Z50
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#### RESISTORS

	R189	RD1/4VM163J
	R157	RD1/4VM274J
	VR153, VR155 (10k Ω)	VCP1156
	VR151, VR152, VR154 (22k Ω)	VCP1158

Mark	No.	Description	Part No.
------	-----	-------------	----------

	VR156 (220k Ω)	VCP1164
	Other Resistors	RD1/4PU□□□J

#### OTHERS

	CN207	MT 4P CONNECTOR	173981-4
	CN208	3P JUMPER CONNECTOR	52147-0310
	CN205	4P JUMPER CONNECTOR	52147-0410
	CN203	5P JUMPER CONNECTOR	52147-0510
	CN204	7P JUMPER CONNECTOR	52147-0710

	CN11	12P JUMPER CONNECTOR	52147-1210
	JA321	OPTICAL LINK OUT	GP1F32T
	CN351	FFC CONNECTOR 32P	HLEM32S-1
	JA401	2P JACK	PKB1032
	JA393	JACK	PKN1005

	X341	X TAL.RES.(16.9344MHz)	PSS1008
	JA391, JA392	JACK	RKN1004
	CN201	CONNECTOR 6P	RKP-533
	CN202	FFC CONNECTOR	SLW16S-1C7
		SCREW PLATE	VNE1948
	X351	CERAMIC RES.(4.19MHz)	VSS1028

### K POWER BOARD ASSY (PWZ3879)

#### SEMICONDUCTORS

⚠	IC31, IC32	ICP-N10T
⚠	IC21	PQ05RA1
⚠	Q61	2SC1815
⚠	Q62, Q63	2SC3068
	D54	MTZJ18B/C

⚠	D11– D14, D31, D52	S5688G
	D61, D62	1SS254
	D32	MTZJ4.7B

#### CAPACITORS

	C27	CEAS101M10
	C52	CEAS101M35
	C26	CEAS222M16
	C11, C13, C15, C16	CKCYF103Z50
	C25 (6800 μF/16V)	VCH1060

#### RESISTORS

	All Resistors	RD1/4PU□□□J
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#### OTHERS

	J11	JUMPER WIRE	D20PDY1235E
⚠		POWER TRANSFORMER	PTT1318
⚠		TERMINAL	RKC-061

### N DISPLAY BOARD ASSY (PWZ3882)

#### SEMICONDUCTORS

	D701– D705	1SS254
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#### CAPACITOR

	C701	CKCYF103Z50
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#### SWITCHES

	S703, S704, S707– S720	VSG1009
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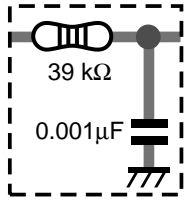


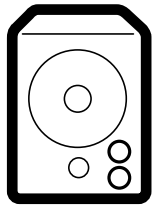
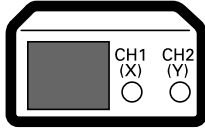
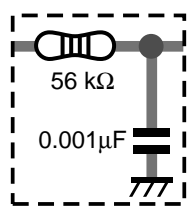
#### OTHERS

	CN701	FFC CONNECTOR 32P	HLEM32R-1
	V701	FL INDICATOR TUBE	PEL1089
	J701	JUMPER WIRE	D20PDD0635E
		REMOTE RECEIVER UNIT	GP1U27X
		6P CABLE HOLDER	51048-0600

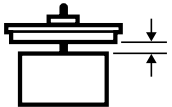
6. ADJUSTMENT

6.1 PREPARATIONS

6.1.1 Jigs and Measuring Instruments

 CD TEST DISC (YEDS-7)	 - screwdriver (small)	 + screwdriver (medium)	 + screwdriver (large)	 Low pass filter ① (39 kΩ + 0.001μF)
 - Precise screwdriver	 Ball point hexagon wrench (size: 1.5mm) GGK1002	 Low-frequency oscillator	 Dual-trace oscilloscope (10 : 1 probe)	 Low pass filter ② (56 kΩ + 0.001μF)

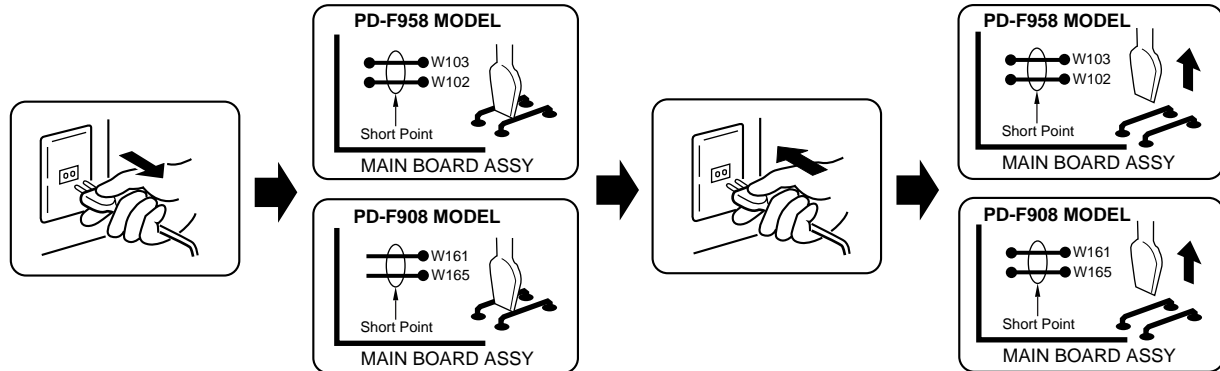
6.1.2 Necessary Adjustment Points

When	Adjustment points
Exchange PICKUP	1.2.3.4.5.6.7. 8.9.10.11.12 → Page 30 - 35
Exchange MAIN BOARD ASSY	1.3.5.6.7.8. 9.10.11.12 → Page 30 - 35
Exchange SERVO MECH ASSY	1.2.3.4.5.6.7. 8.9.10.11.12 → Page 30 - 35
Exchange SPINDLE MOTOR	 ADJ → Page 10

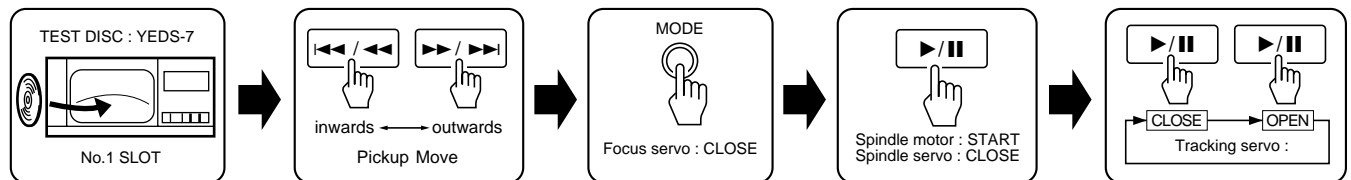
## 6.2 ADJUSTMENT

### 6.2.1 How to Start/Cancel Test Mode

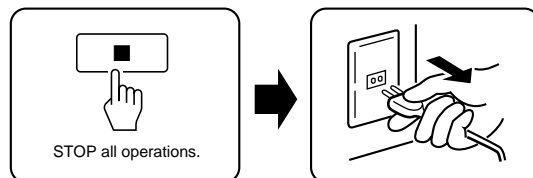
#### TEST MODE : ON



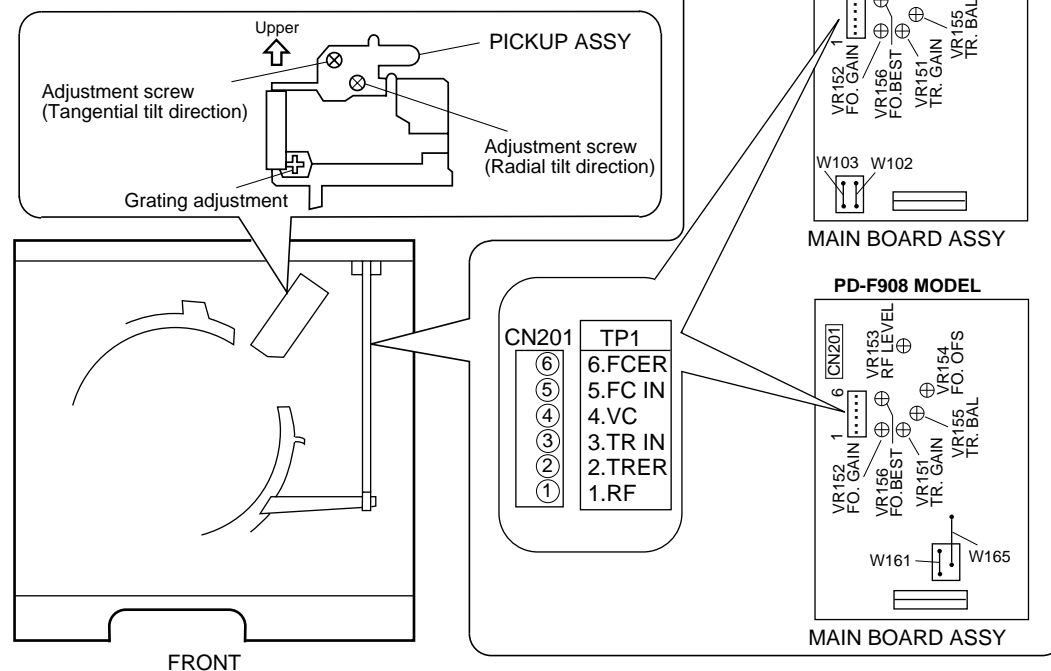
#### TEST MODE : PLAY



#### TEST MODE : STOP → CANCEL

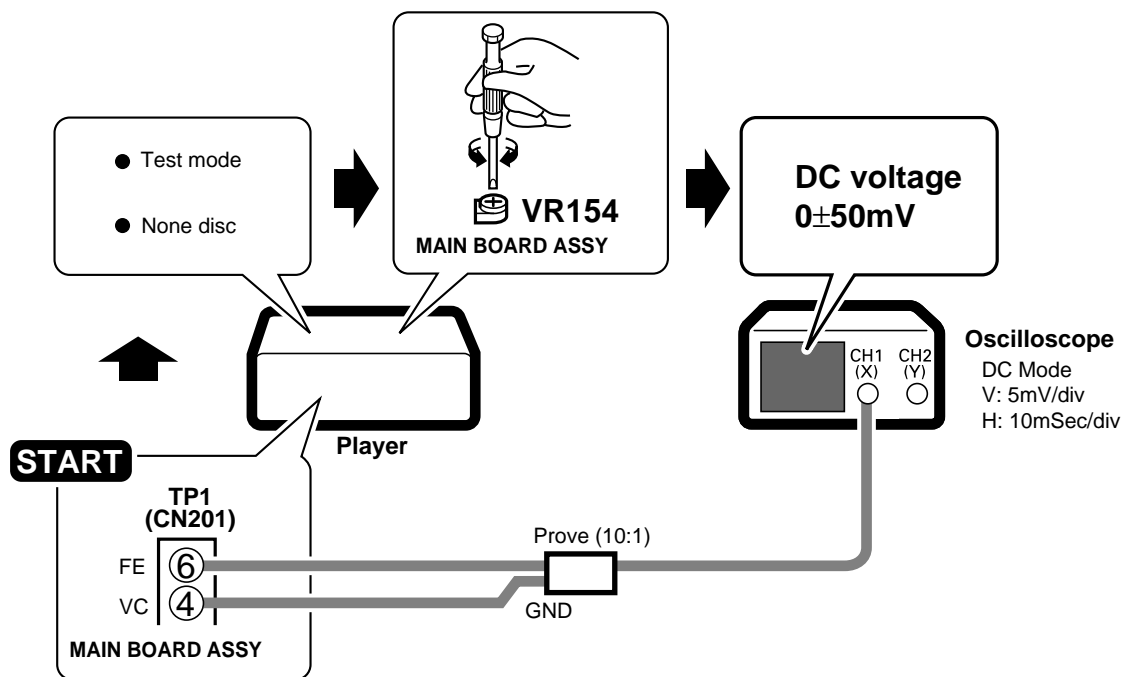


### 6.2.2 Adjustment Location

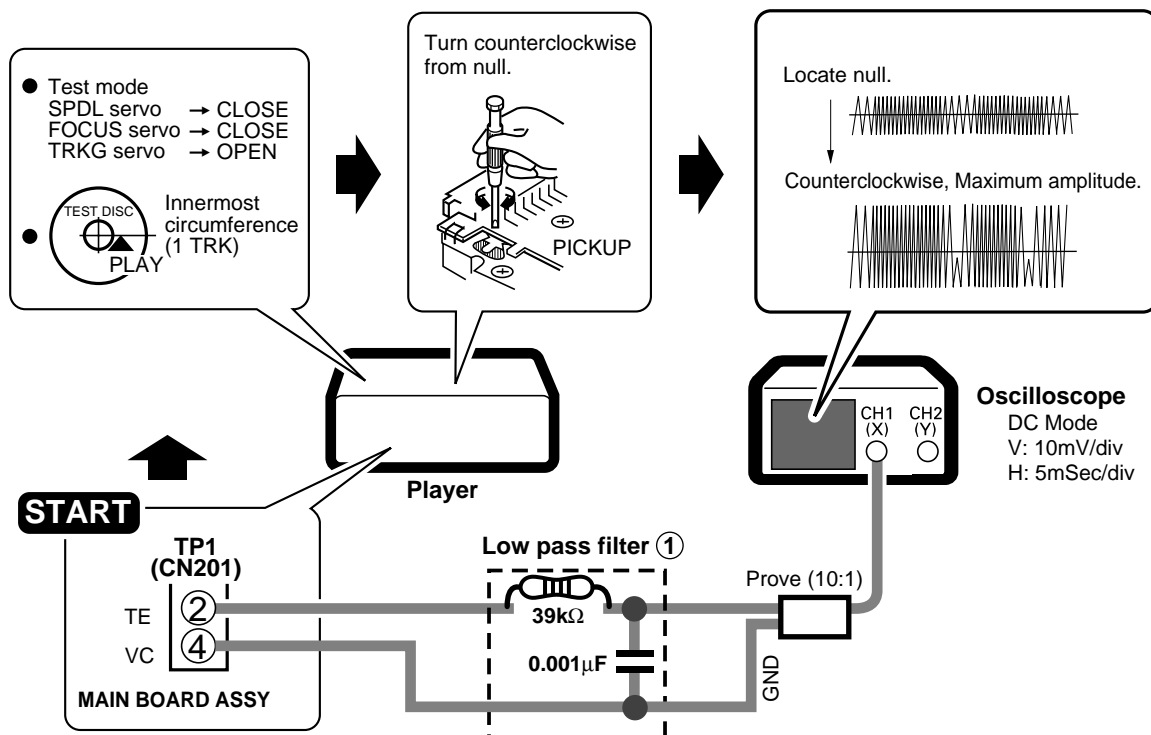


## 6.2.3 Check and Adjustment

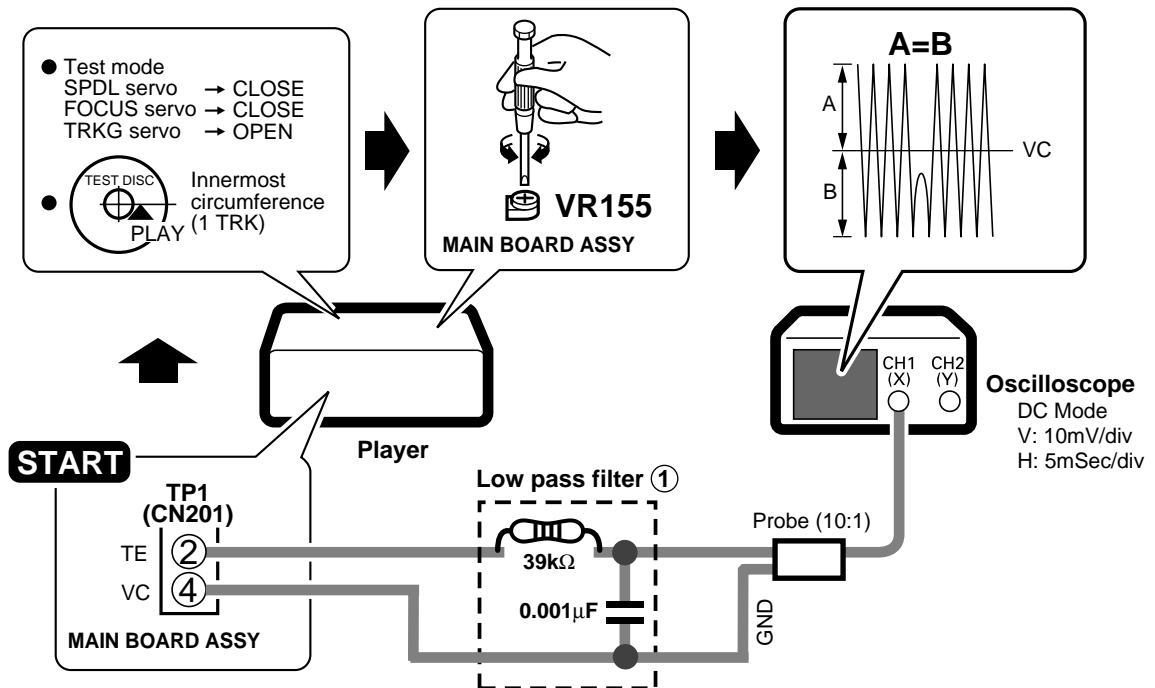
### 1. Focus Offset Adjustment



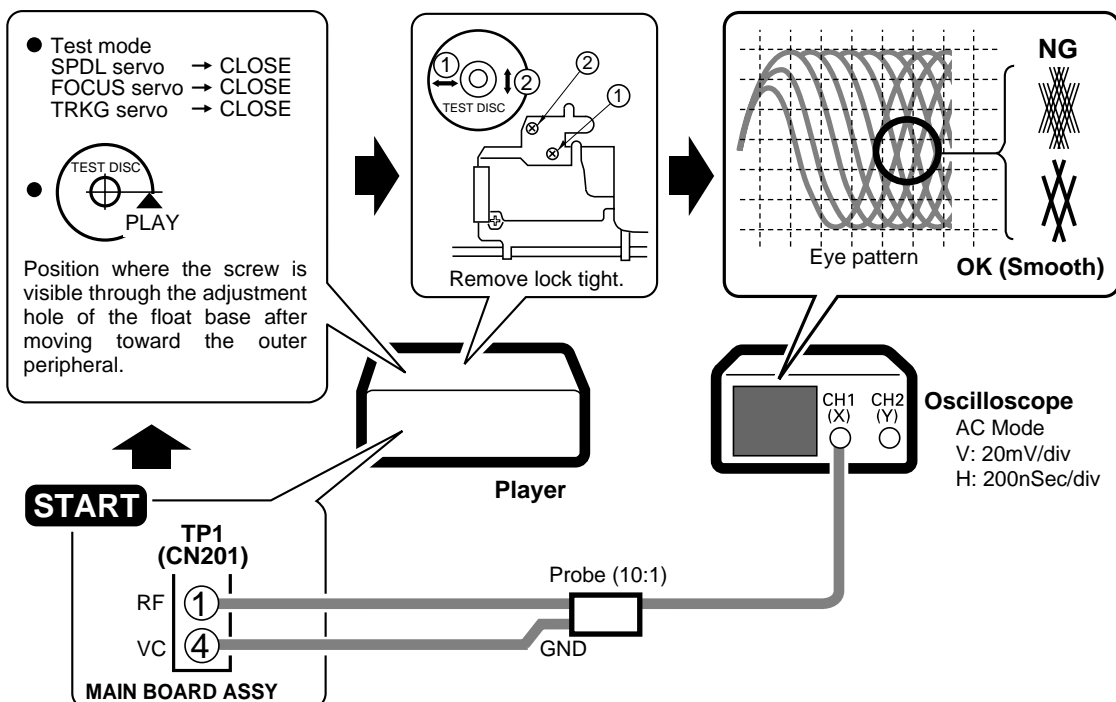
### 2. Grating Adjustment



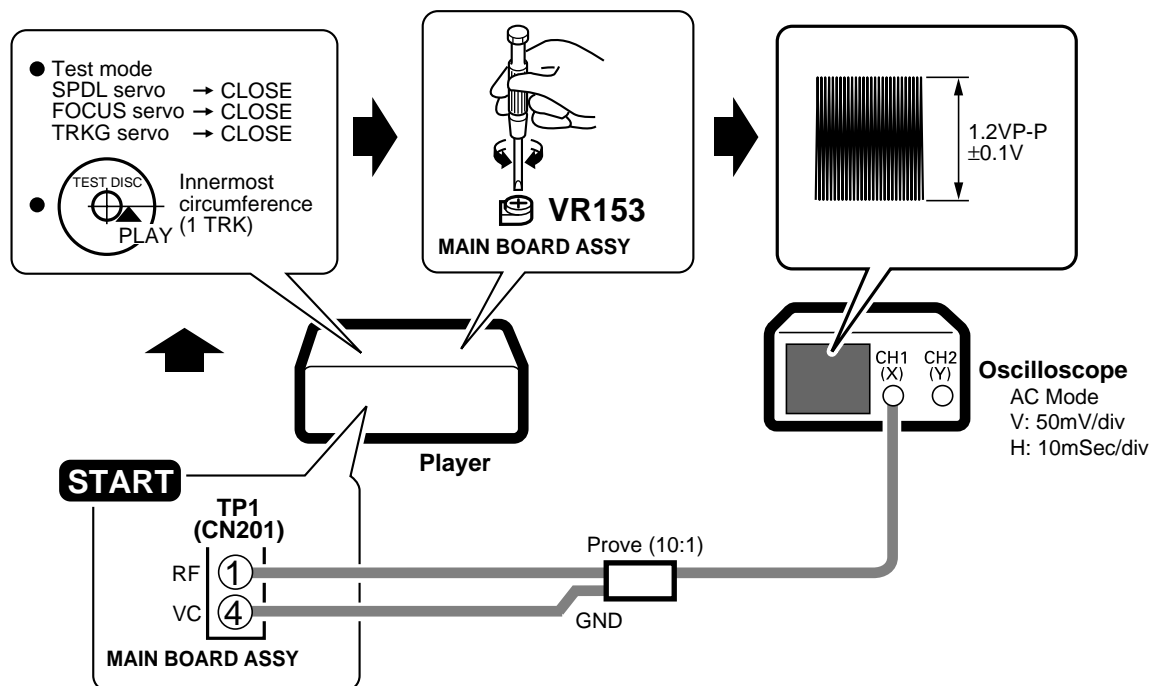
### 3. Tracking Error Balance Adjustment



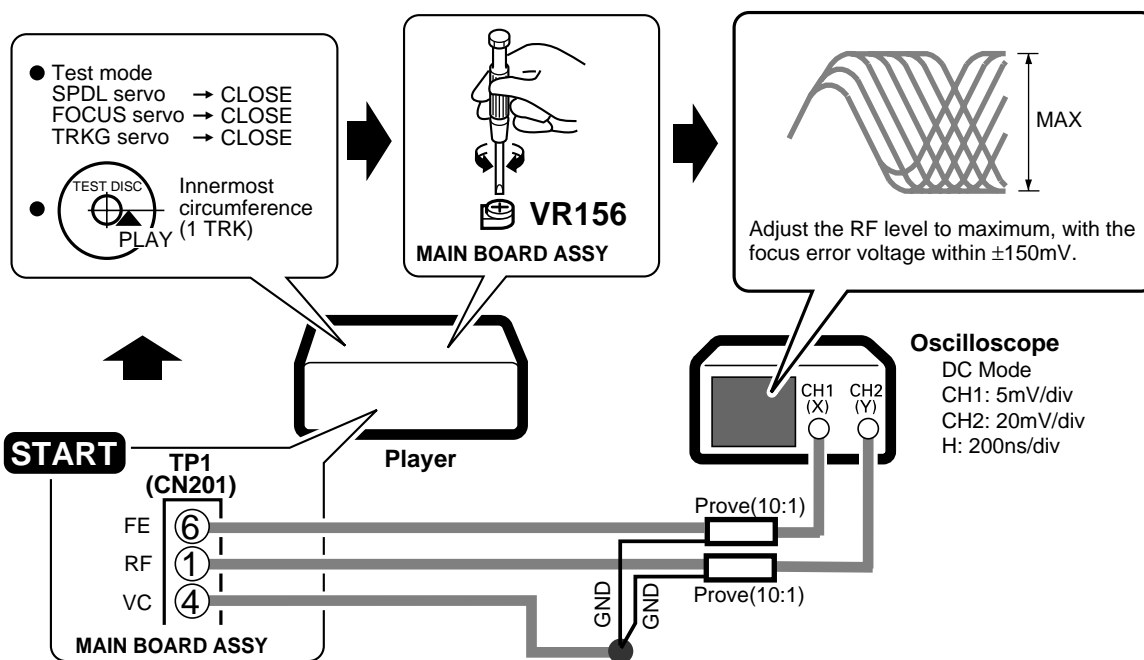
### 4. Pickup ①Radial/ ②Tangential Direction Tilt Adjustment



## 5. RF Level Adjustment I

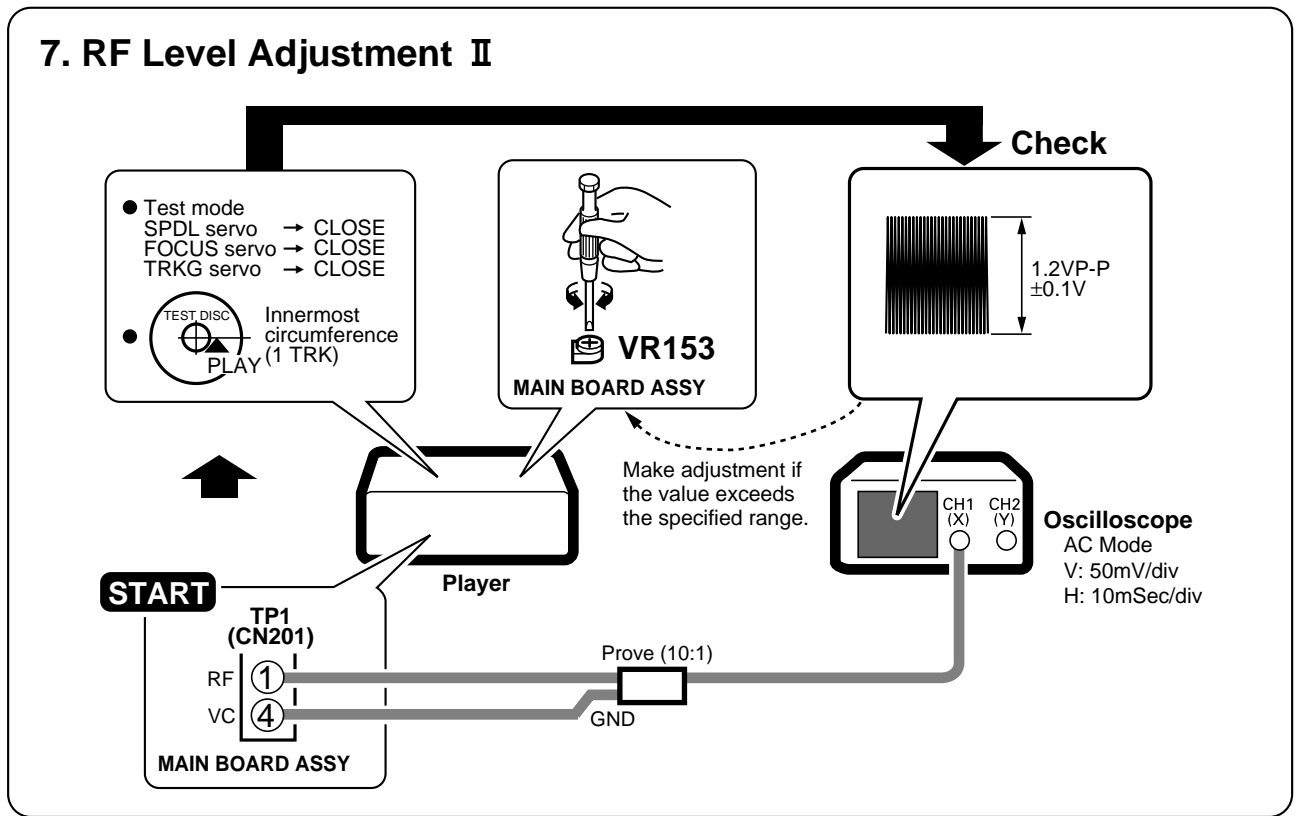


## 6. Focus Best Adjustment I

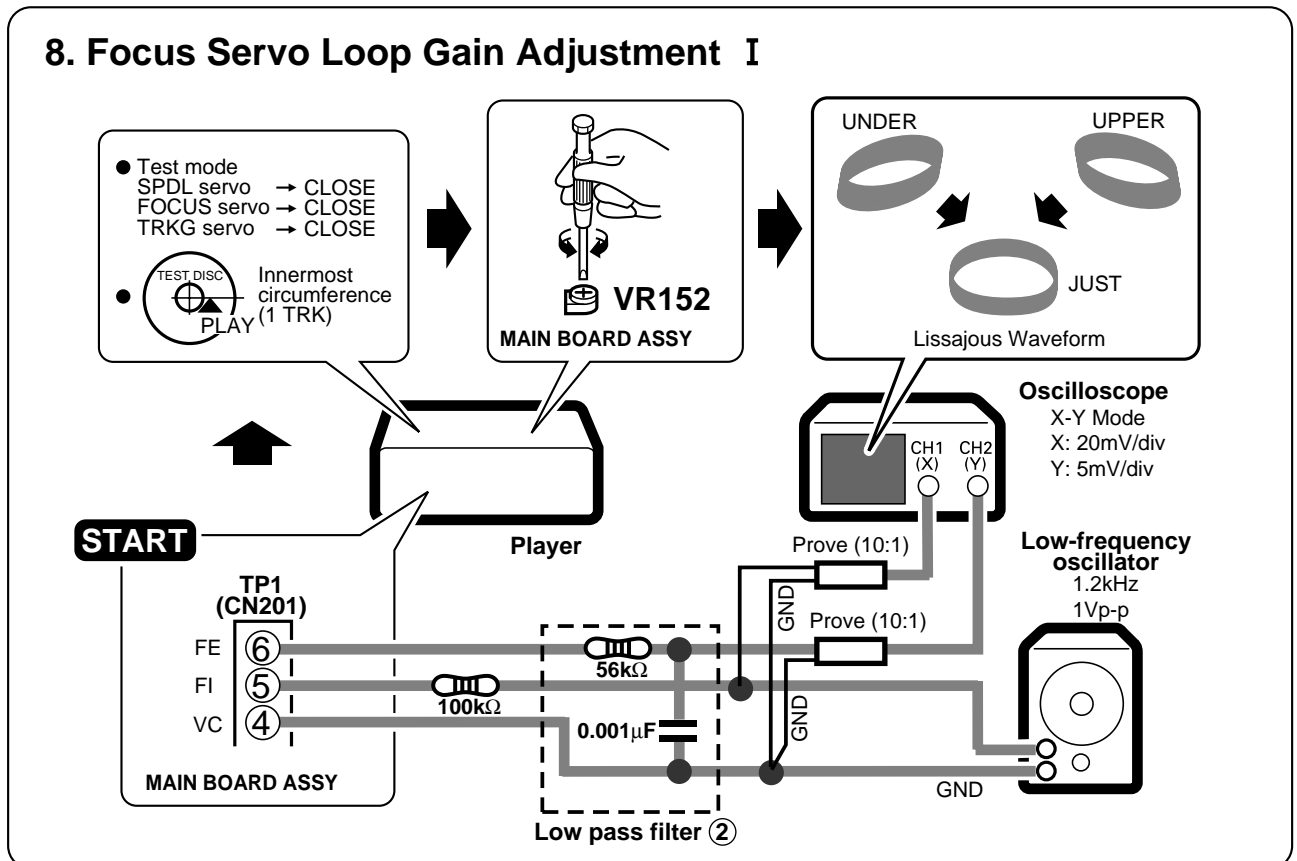




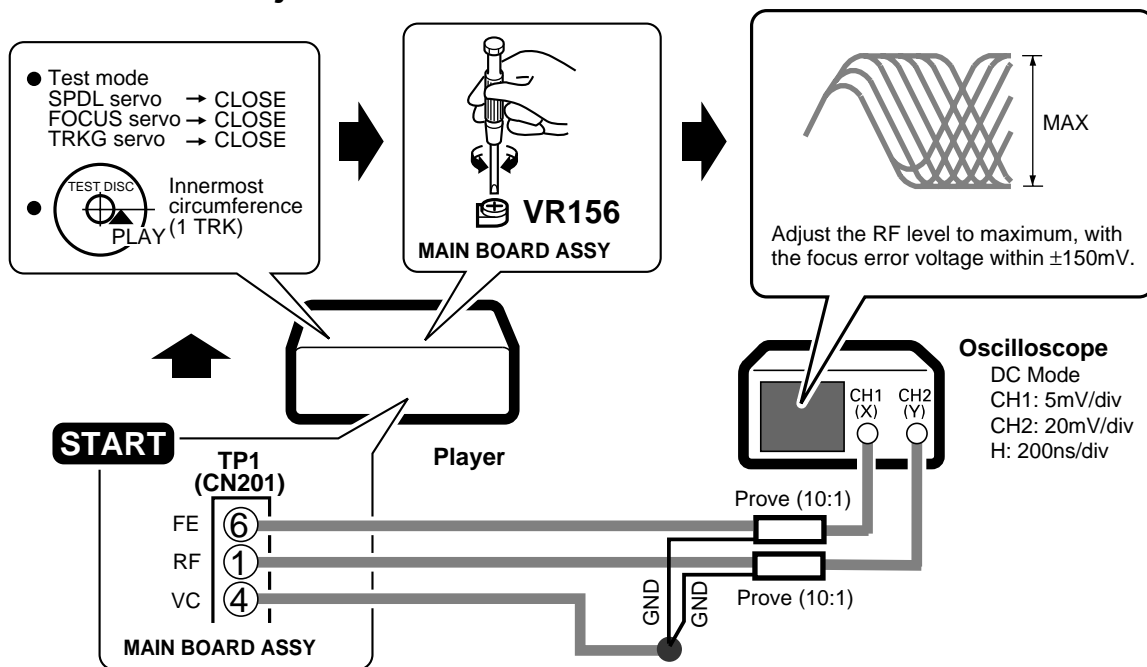
## 7. RF Level Adjustment II



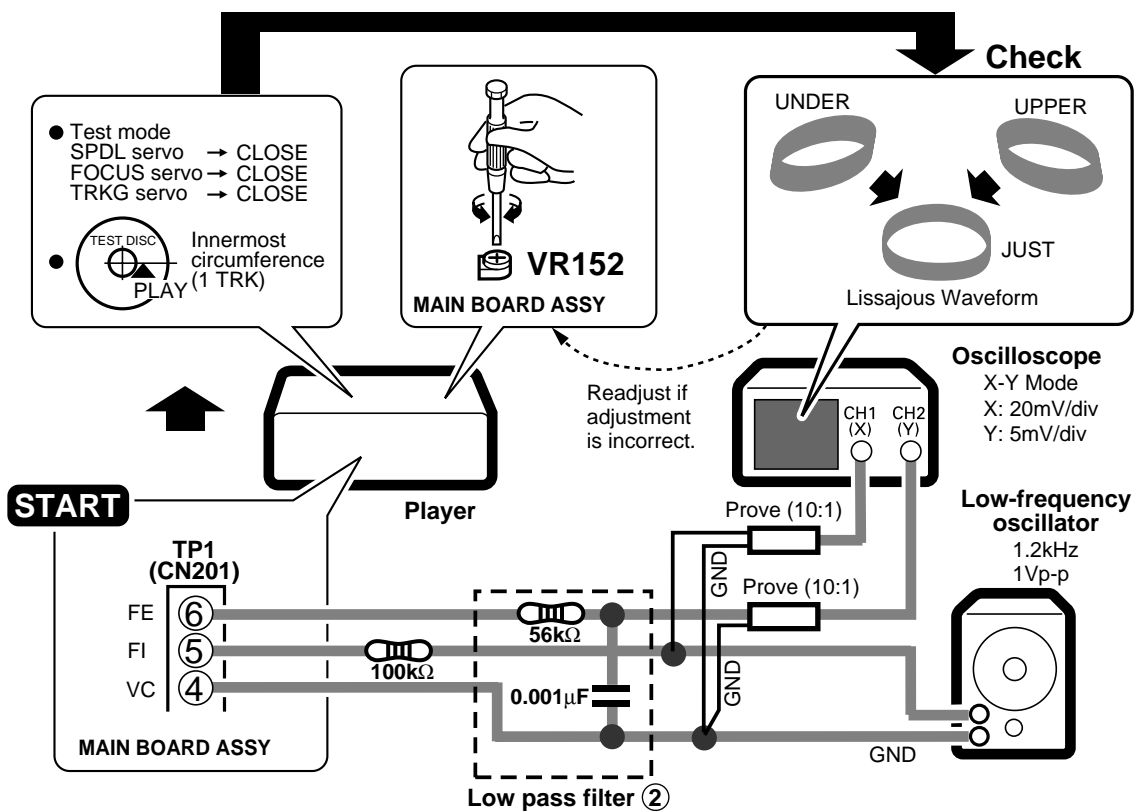
## 8. Focus Servo Loop Gain Adjustment I



## 9. Focus Best Adjustment II

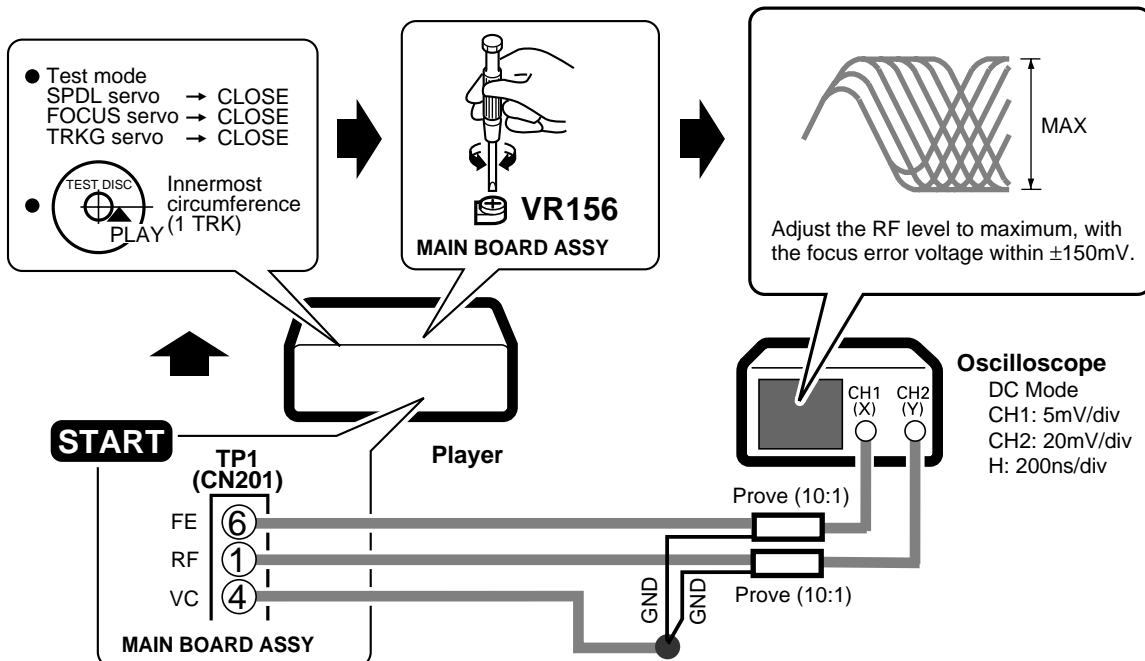


## 10. Focus Servo Loop Gain Adjustment II

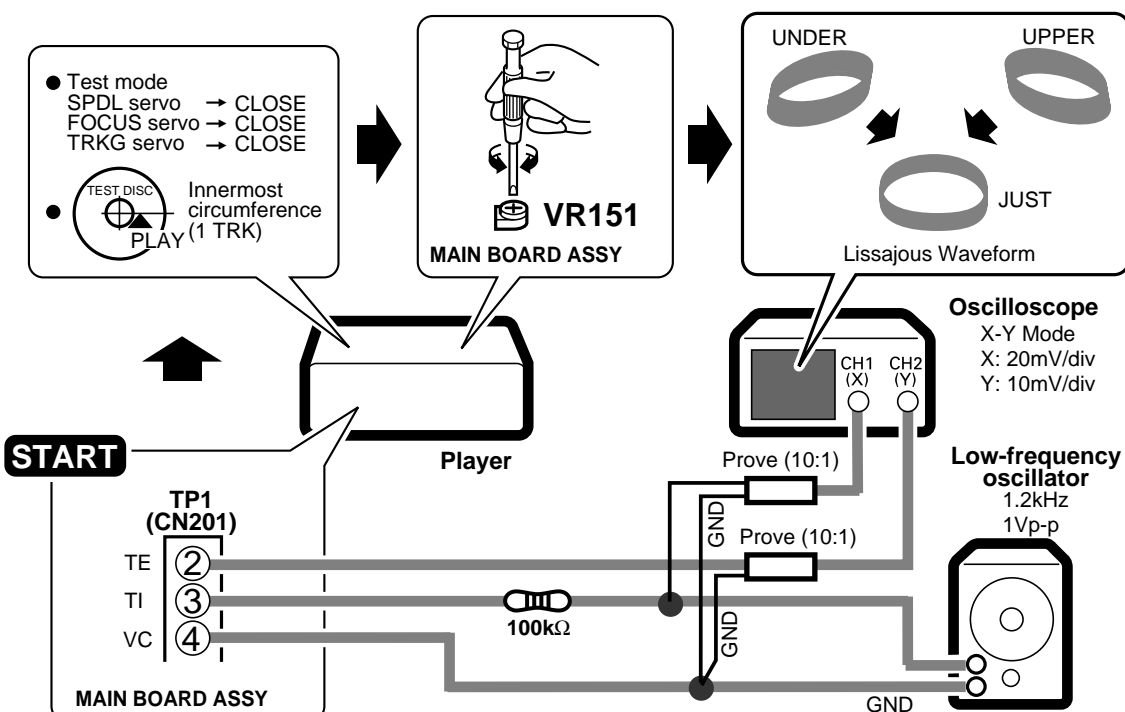


## 11. Focus Best Adjustment III

Adjust this point only if adjustment was made in item 10.



## 12. Tracking Servo Loop Gain Adjustment



## 7. GENERAL INFORMATION

### 7.1 PARTS

#### 7.1.1 IC

#### ■ PE5032A (IC701:DISPLAY BOARD ASSY)

#### ● SYSTEM CONTROL MICRO COMPUTER

#### ● Pin Function

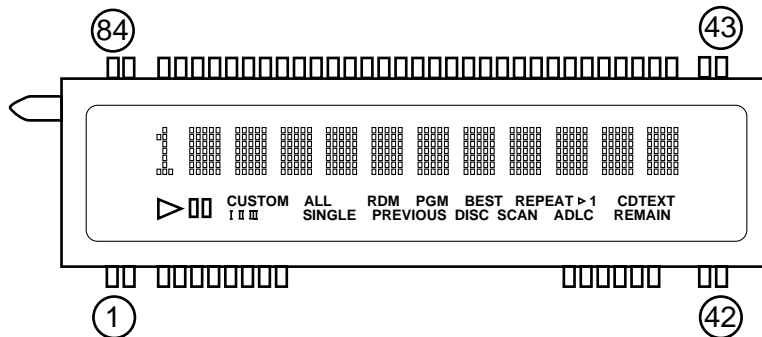
●The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
1	VDD	+5V	+5V	47	PW ON	O	Standby - led /osce.
2	CLS	I	Hood open/close SW input.	48	KD3	I	Key data input.
3	OPEN	I	Open (CLS:H, OPEN:L), Close (CLS:L, OPEN:H)	49	KD2	I	
4	DCNT	I	Disc count pulse input.	50	KD1	I	
5	DPOS	I	Disc position detection pulse input.	51	KD0	I	
6	DSLT	O	Selector output. Count up(DSRT:L, DSLT:H) Count down(DSRT:H, DSLT:L) Stop(DSRT:L, DSLT:L)	52	S36	O	FL driving segment output.
7	DSRT	O		53	S35	O	
8	MCLS	O		54	S34	O	
9	MOPN	O	Hood motor output. Open(MOPN:H, MCLS:L) Close(MOPN:L, MCLS:H) Stop(MOPN:L, MCLS:L)	55	S33	O	
10	RESET	I	CPU Reset. (L: RESET)	56	S32	O	
11	X2	–	Crystal connection for system clock oscillation :4.19MHz.	57	S31	O	
12	X1	–		58	S30	O	
13	IC	GND	GND	59	S29	O	
14	XT2	–	NC (OPEN)	60	S28	O	
15	GND	I	GND	61	S27	O	
16	VDD	+5V	+5V	62	S26	O	
17	CLOCK	O	Serial clock.	63	S25	O	
18	MDAT	O	LSI control data.	64	S24	O	
19	SQSO	I	Serial input. (Q data/fcok/gfs/sens/clmp/eject/insd)	65	S23	O	
20	XLAT	O	LSI control data latch pulse output.	66	S22	O	
21	XRST	O	Reset input for each LSI.	67	S21	O	
22	SCLK	O	CD TEXT timing data clock output.	68	S20	O	
23	STBL	O	L: output.	69	S19	O	
24	SRDT	I	CD TEXT data input.	70	S18	O	
25	AVSS	–	GND	71	S17	O	
26	LIN	O	Lauding motor output. IN(LIN:H, LOUT:L) OUT(LIN:L, LOUT:H) Stop(LIN:L, LOUT:L)	72	S16	O	
27	LOUT	O		73	S15	O	
28	CLED	I/O	Center LED control (ON:H, OFF:input)	74	S14	O	
29	DQSY	I	CD TEXT data input.	75	S13	O	
30	MUTB	O	Muting output (L:MUTE)	76	S12	O	
31	SYC3	O	Synchronous output.	77	S11	O	
32	SYC1	I	Synchronous input.	78	S10	O	
33	DLAT	O	DAC control data latch pulse output.	79	VLOAD	-34V	-34V
34	AVDD	+5V	+5V	80	S9	O	FL driving segment output.
35	AVREF	GND	GND	81	S8	O	
36	CNIN	I	C.OUT input.	82	S7	O	
37	TRST	O	CD TEXT decoder reset output. (L: reset)	83	S6	O	
38	SCOR	I	Subcode sync SO+S1 input.	84	S5	O	
39	SR IN	I	Remote control data input.	85	S4	O	
40	VSS	GND	GND	86	S3	O	
41	QSEL	O	Signal output for Q DATA expansion	87	S2	O	
42	MUTE	O	Muting output for expansion. (MUTE:H)	88	S1	O	
43	TRCH	O	Data serial output for expansion.	89	G12	O	
44	SCL	O	EEPROM clock output	90	G11	O	
45	SDA	I/O	EEPROM data IN/OUTPUT	91	G10	O	
46	VDD	+5V	+5V	92	G9	O	
				93	G8	O	
				94	G7	O	
				95	G6	O	
				96	G5	O	
				97	G4	O	
				98	G3	O	
				99	G2	O	
				100	G1	O	

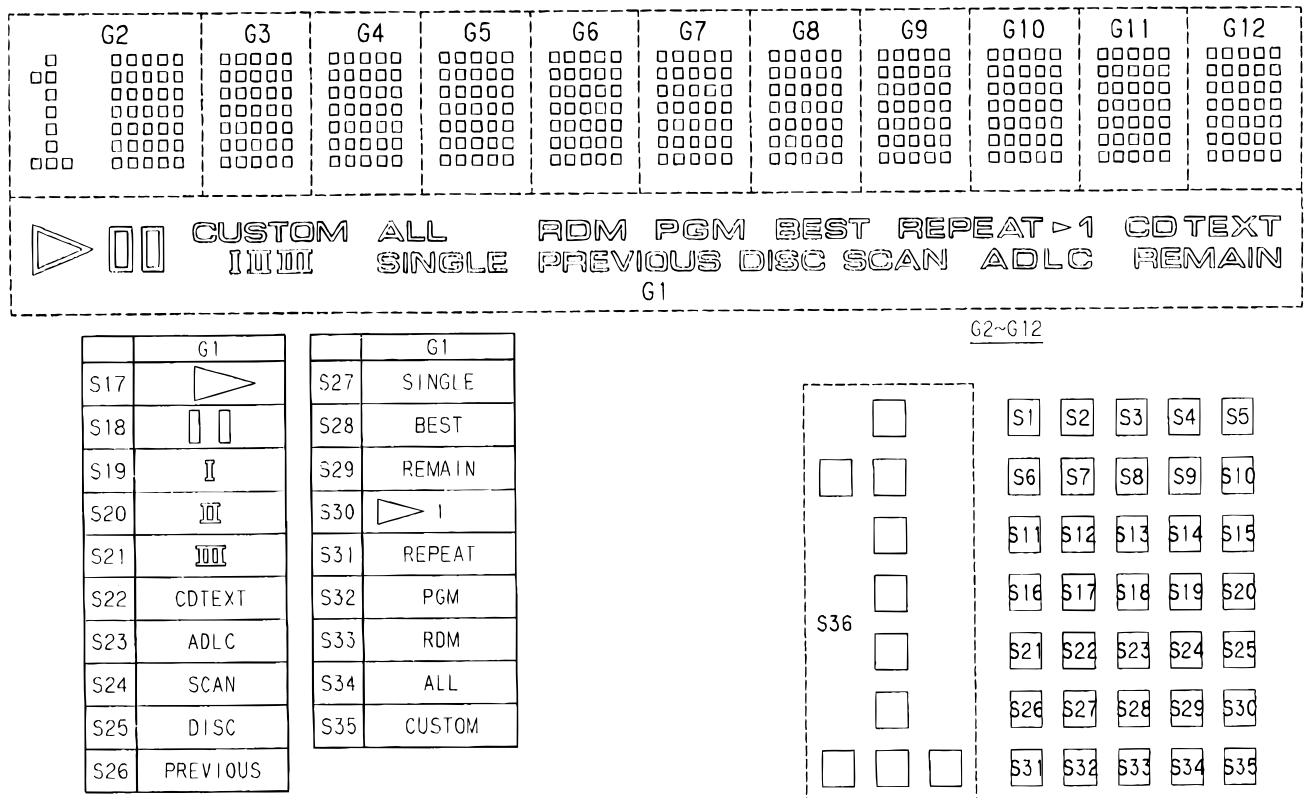
### 7.1.2 DISPLAY

■ PEL1095 (V701: DISPLAY BOARD ASSY) : FOR PD-F958

- Pin Assignment



- Anode Grid Assignment



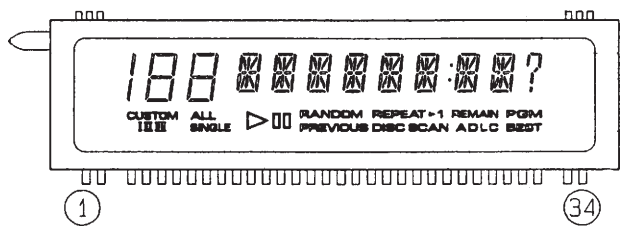
### ● Pin Connection

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Assignment	NL	NL	NP	NP	S29	S30	S31	S32	S33	S34	S35	S36	NP	NP	NP	NP	NP	NP	NP	NP	NP
Pin No.	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
Assignment	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	G1	G2	G3	G4	G5	G6	NP	NP	NP	NL	NL
Pin No.	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Assignment	F2	F2	NP	NP	G7	G8	G9	G10	G11	G12	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11
Pin No.	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
Assignment	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	NP	NP	F1	F1

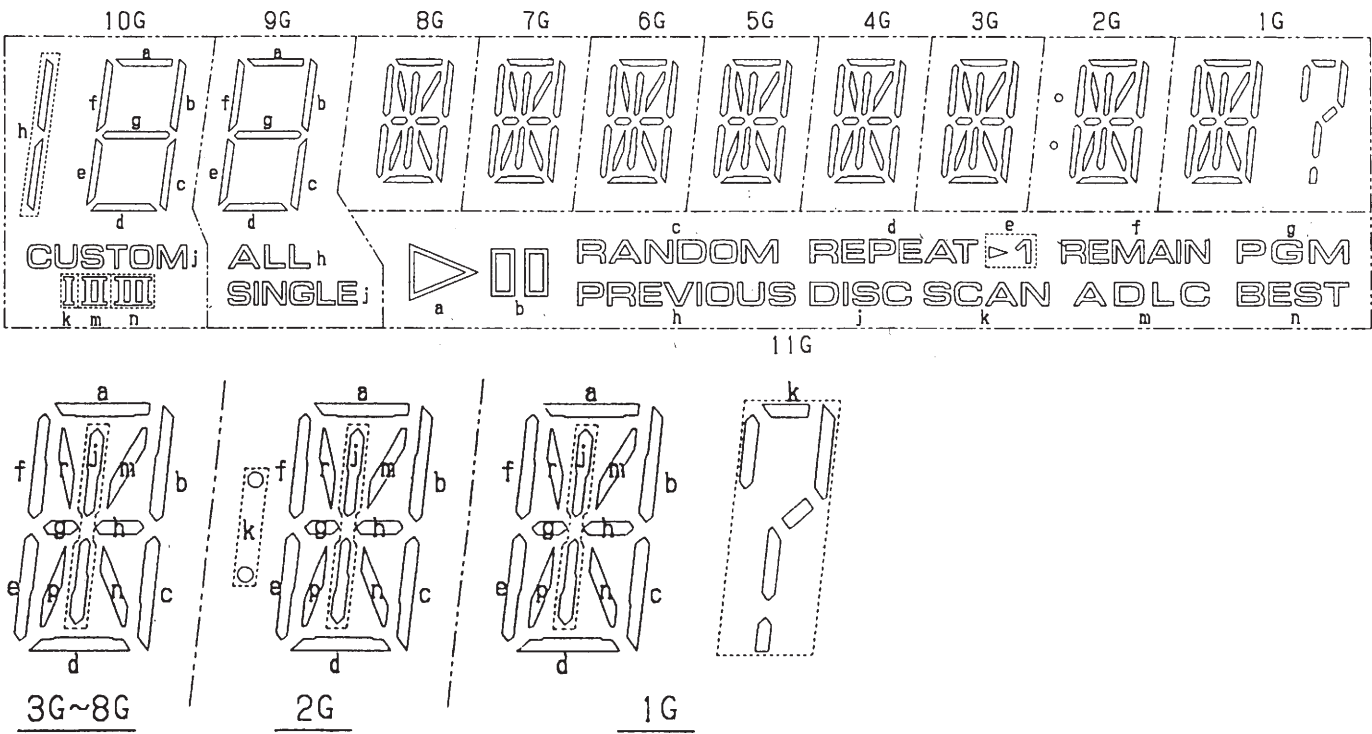
F1, F2: Filament    G1~G12: Grid    S1~S36: Anode    NP: No Pin    NL: No Lead

■ PEL1089 (V701: DISPLAY BOARD ASSY) : FOR PD-F908

● Pin Assignment



● Anode Grid Assignment



● Pin Connection

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Connection	F	F	NP	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	NL	NL	NL	p	r	a

Pin No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Connection	b	c	d	e	f	g	h	j	k	m	n	NP	F	F

F:Filament 1G~11G:Grid a~h, j, k, m, n, p, r:Anode NP:No Pin NL:No Lead

## 7.2 DIAGNOSIS

### 7.2.1 ERROR CODE DISPLAY

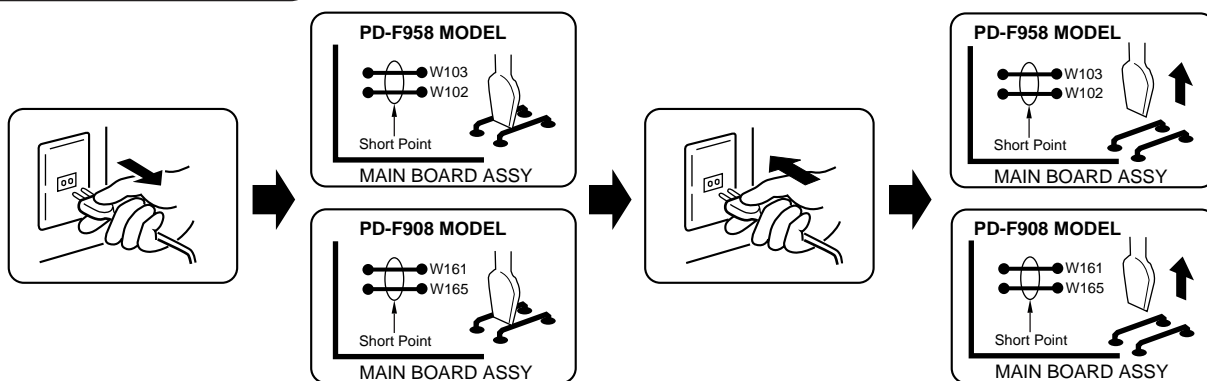
If a failure occurs in the Loading mechanism, the error symbol is automatically displayed on the fluorescent display screen of the front panel.

### 7.2.2 ERROR HISTORY and DISPLAY

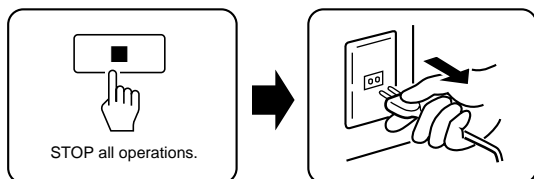
#### Error history display in test mode

The previously generated errors (NG processing) can be confirmed in the test mode. Since the has a backup function, the error history is memorized even if the power is turned off. (Memory holding time : About two days)

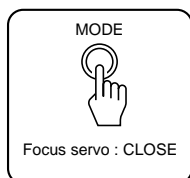
#### TEST MODE: ON



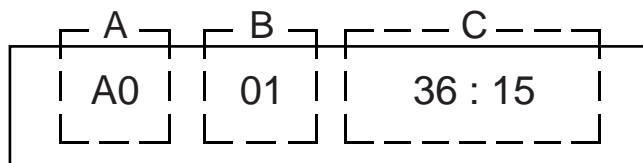
#### TEST MODE: STOP CANCEL



■ Press the "BEST" button of the keys on the main body.



An error appears on the fluorescent indicator display by the above operation.



A: Disc No.	: Error code
B: Track No.	: Error sequence
C: Minute:second No.	: Error generation mode
	(Only 10's digit is valid.)

The previously generated 16 error codes (maximum) can be memorized. These error codes are displayed one at a time in the ascending order by pressing the "BEST" button again.

*Note : A product performs fail safe operation when an error occurs. At that time, an error code is memorized by the fail safe operation after the error is eliminated.*

## 7.2.3 ERROR HISTORY DISPLAY

### (1) Disc No. A : Detail of error code at portion

<Note> The user display appears only when the normal operation cannot be returned even if the fail safe operation is executed after each error occurs.

User	display	Description
None	A0	<ul style="list-style-type: none"> <li>A disc couldn't be detected for playback after loading because;               <ul style="list-style-type: none"> <li>No disc existed.</li> <li>A disc was turned upside down.</li> <li>A disc was dirty.</li> <li>A disc was loaded incompletely.</li> </ul> </li> <li>The focus got out of place during playback due to the crack and stain on the disc.</li> </ul>
None	A1	<ul style="list-style-type: none"> <li>The servo mechanism couldn't move to the desired tune position within a fixed time during selection of a tune from playback or during playback.</li> </ul>
U1	A3	<ul style="list-style-type: none"> <li>A disc couldn't be loaded within a fixed time. (A disc couldn't be carried from the rack block.)</li> </ul>
	A4	<ul style="list-style-type: none"> <li>A disc couldn't be unloaded within a fixed time. (A disc couldn't be returned to the rack block.)</li> </ul>
U2	A2	<ul style="list-style-type: none"> <li>The LOADING mechanism couldn't move to the desired disc position within a fixed time during selection of a disc from playback or during playback start from stop.</li> </ul>
	A5	<ul style="list-style-type: none"> <li>The LOADING mechanism couldn't be forcibly returned to the home position (left position when viewed from the front) within a fixed time after it is initialized or becomes NG.</li> </ul>
None	A6	<ul style="list-style-type: none"> <li>A disc couldn't be normally rotated for playback after loading because;               <ul style="list-style-type: none"> <li>A disc was turned upside down.</li> <li>A disc was dirty</li> <li>A disc was loaded incompletely.</li> </ul> </li> <li>A disc couldn't be normally rotated during playback due to the crack and stain on the disc.</li> </ul>

User	display	Description
None	A7	<ul style="list-style-type: none"> <li>Mechanism position just before the LOADING mechanism shifts to the disc selection operation when the DCNT pin is low. (The DCNT pin is usually high when the LOADING mechanism is in the stop state. The mechanism position is thus judged to have been shifted for some reason. The shifted mechanism position may cause a failure.)</li> </ul>
None	A8	<ul style="list-style-type: none"> <li>Discrepancy has occurred between the detected disc position and the current disc position during movement of the loading mechanism. (The system may incorrectly counted the waveforms of the DCNT and DPOS terminals. If counting is incorrect, the position of the disc No. displayed does not match the disc position counted.)</li> </ul>
None	A9	<ul style="list-style-type: none"> <li>Mechanism position during disc loading when the DCNT pin is low. (The DCNT pin is usually high when the LOADING mechanism is in the stop state. The mechanism position is thus judged to have been shifted for some reason. The shifted mechanism position may cause a failure.)</li> </ul>
None	AA	<ul style="list-style-type: none"> <li>The pickup block cannot return to the innermost circumference when the playback is Completed or another disc is shifted.</li> </ul>

#### Hood section

User	display	Description
U3	P0	The hood did not open within the specified time. The switch of the hood was malfunctioning.
	P1	The hood did not close within the specified time. The switch of the hood was malfunctioning.
	P2	The hood was attempted to be opened with force when it was completely closed. The switch of the hood was malfunctioning.

### (2) Track No. B : Error sequence in portion

The display of 1 to 16 appears. The low number indicates the recently generated error. The error whose number is "1" was generated most recently.

### (3) Minute : Second No. C : Detail of error generation mode in portion

Indicates the internal mode in which the displayed error is generated. The upper digit in "minute : second" has the meaning.

Digit of minute		Digit of second	
Display	Contents	Display	Contents
0 *	Spindle stop operation	0 *	During closing of the hood and when the hood is completely close
1 *	Disc return operation		
2 *	Disc selection operation		
3 *	Setup operation	1 *	During opening of the hood and when the hood is completely open
4 *	CD-R setup operation		
5 *	TOC read		
6 *	Track search operation		
7 *	Play		
8 *	Pause		
9 *	Manual search		



## 7.2.4 DISASSEMBLY

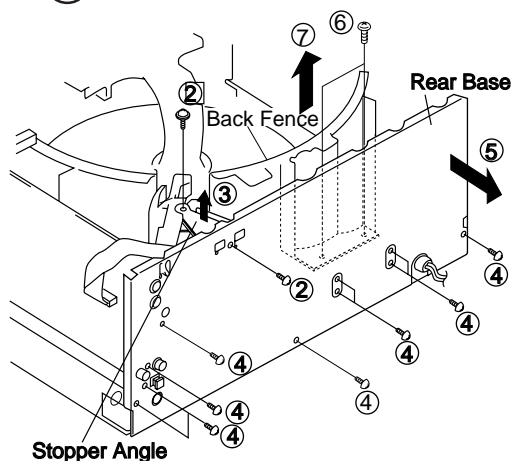
### ■ REMOVING THE LOADING MECHANISM ASSY

① Remove the Bonnet.

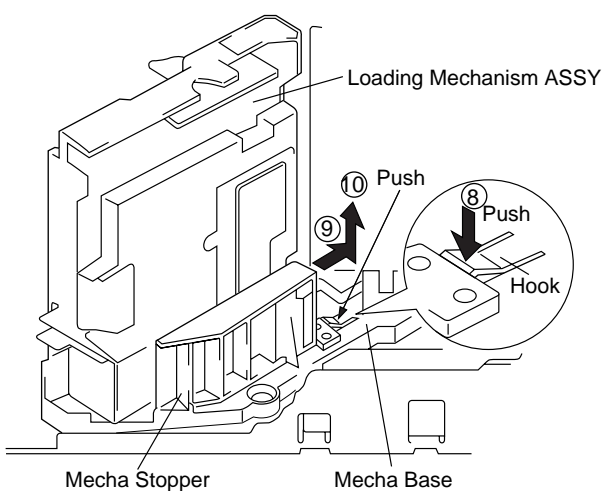
② – ③ Remove the Screws and Stopper Angle.

④ – ⑤ Remove the Screws and Rear Base.

⑥ – ⑦ Remove the Screws and Back Fence.

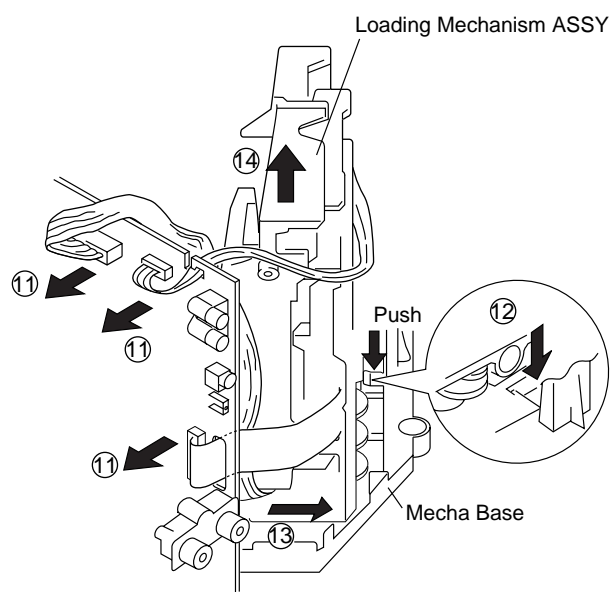


⑧ – ⑩ While holding down the hook of the Mecha Base, slide the Mechanism Stopper toward the right to pull up and remove the Mecha Stopper.



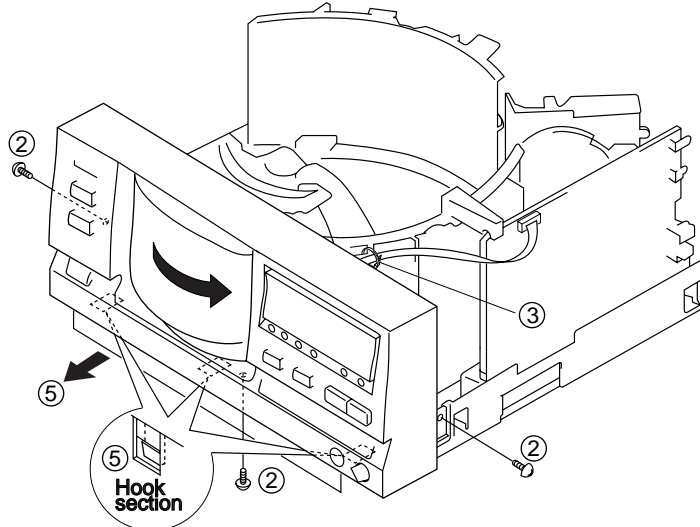
⑪ Remove the each wire.

⑫ – ⑭ While holding down the hook of the Mecha Base, slide the Loading Mechanism Assy to pull up and remove the Loading Mechanism Assy.



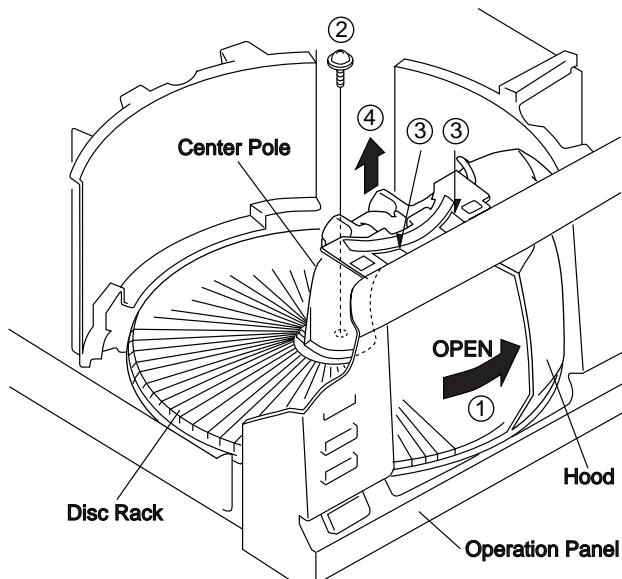
## ■ REMOVING THE OPERATION PANEL

- ① Remove the Bonnet.
- ② Remove the Screws.
- ③ Cut the Binder securing the wire material.
- ④ Remove the Center Pole. (Refer to the “REMOVING THE DISC RACK”)
- ⑤ Shift the Front Panel slightly toward you while paying attention to the back side hooks on the Chassis.



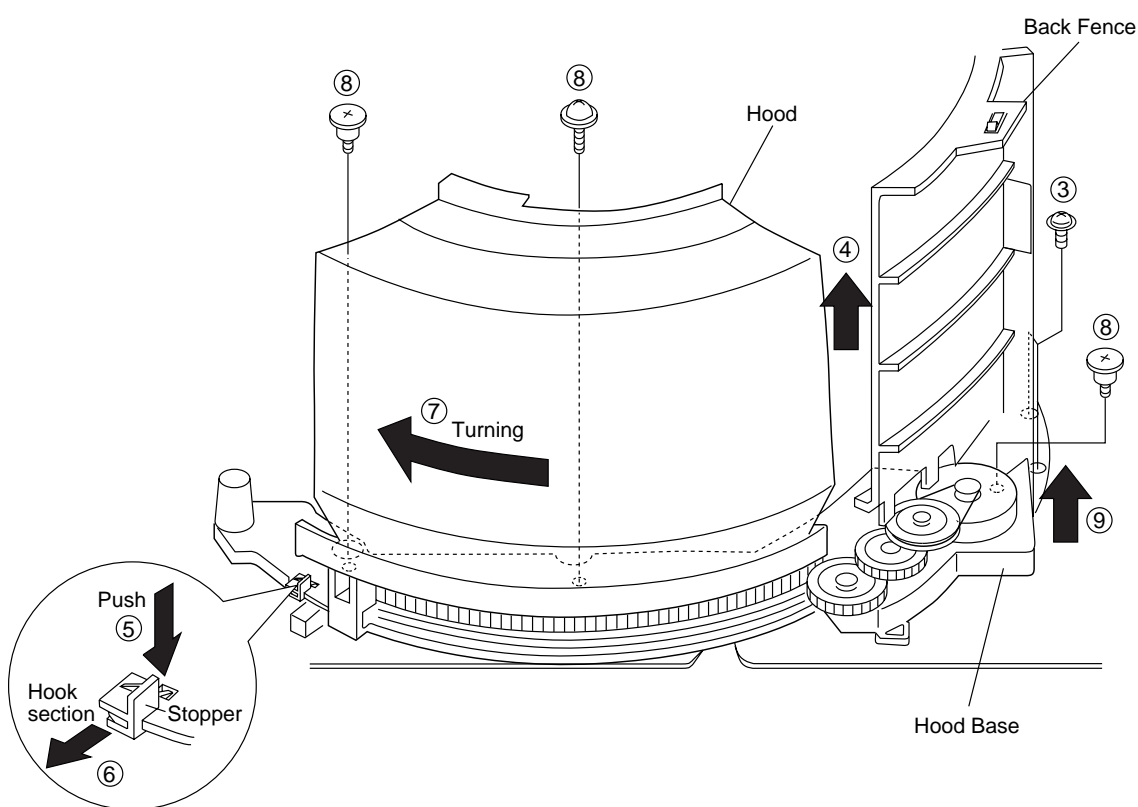
## ■ REMOVING THE DISC RACK

- ① Open the Hood.
- ② Remove the Screws.
- ③ - ④ Press the 2 hooks to remove the Center Pole from the Operation Panel.

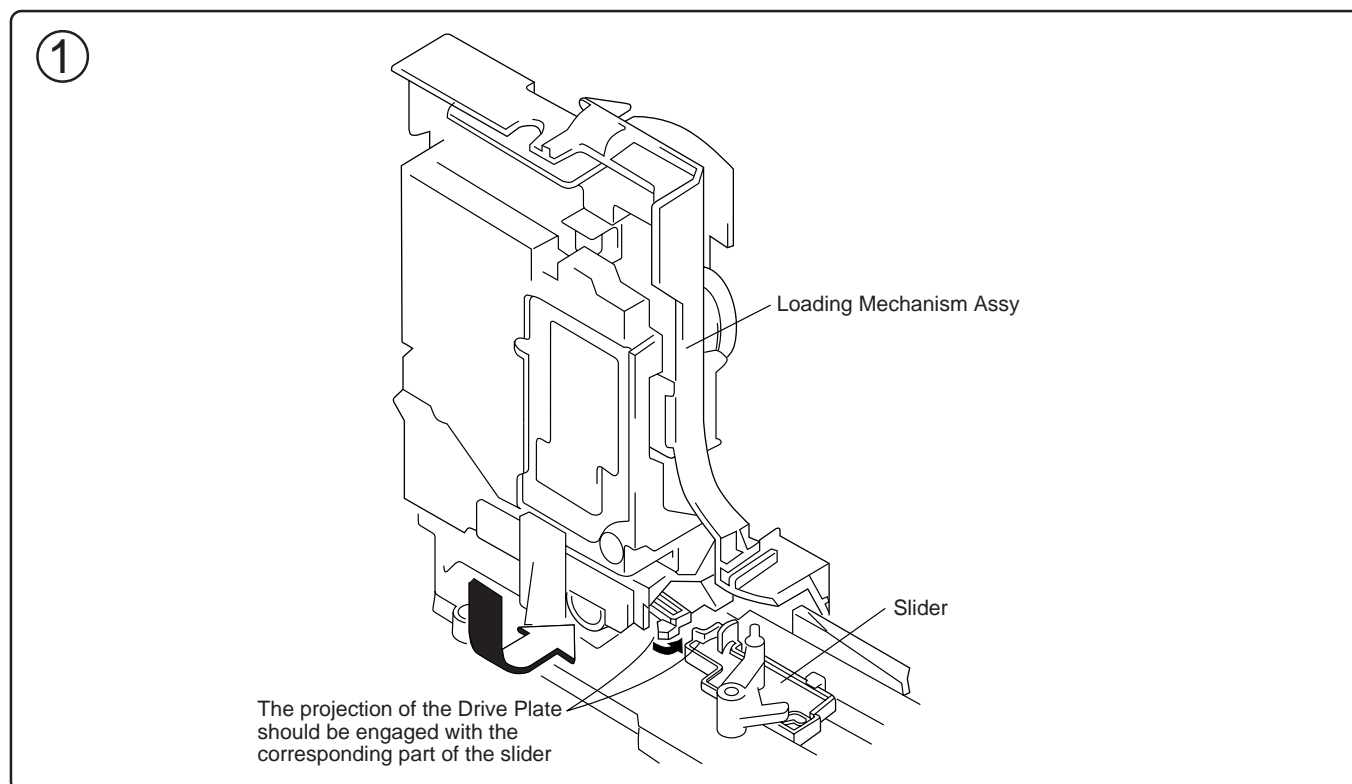


## ■ REMOVE THE HOOD and HOOD BASE

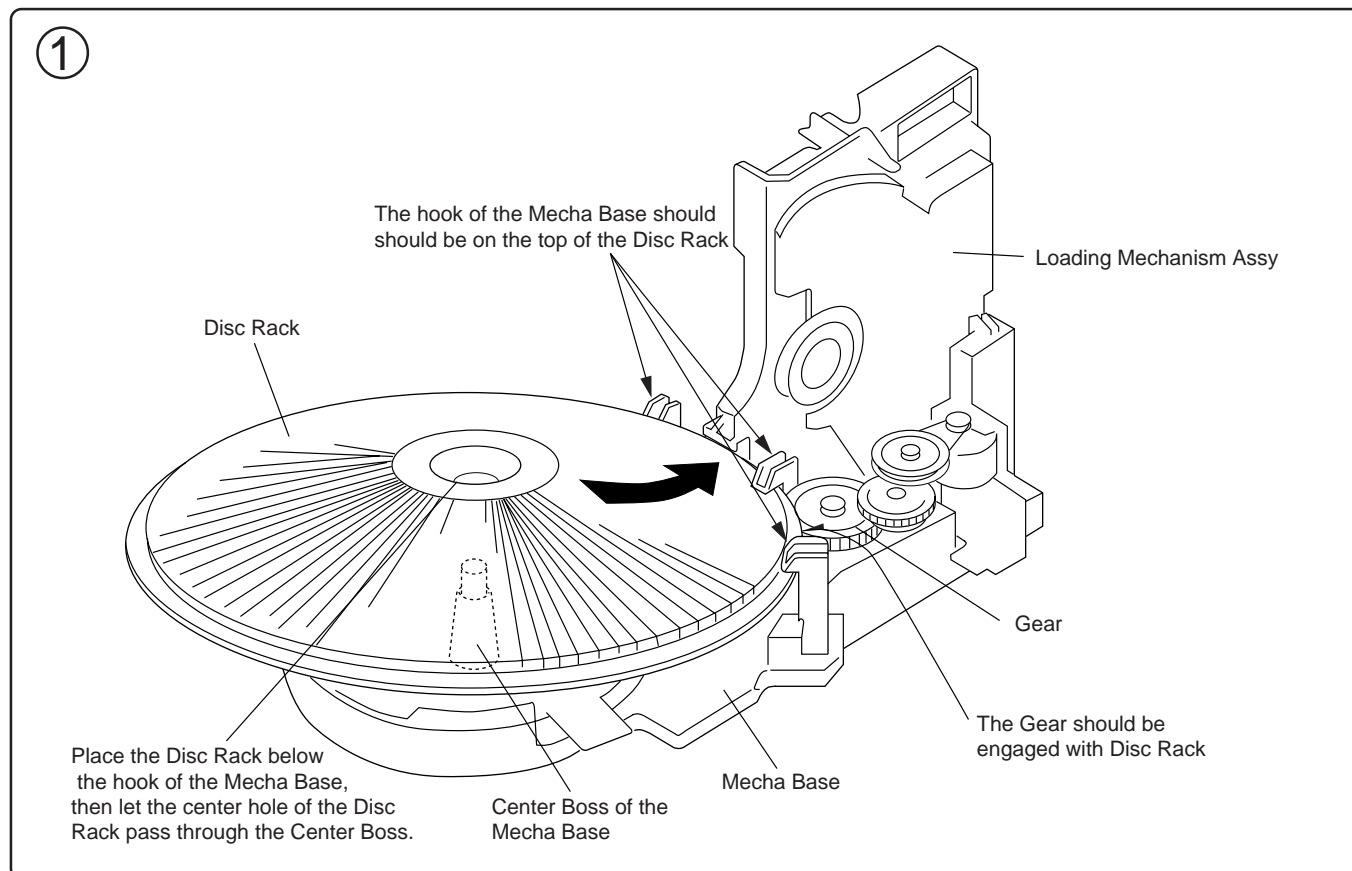
- ① Remove the Bonnet.
- ② Remove the Operation Panel. (Refer to the “REMOVING THE OPERATION PANEL”)
- ③ Remove the Screws.
- ④ Remove the Back Fence.
- ⑤ - ⑦ Press the hook of the Stopper of the Hood Base to remove the Stopper. Slide the Hood toward the left to remove the Hood.
- ⑧ Remove the Screws.
- ⑨ Remove the Hood Base.



## ■ INSTALLING THE LOADING MECHANISM ASSY

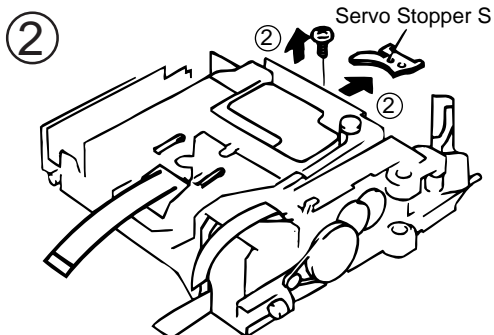
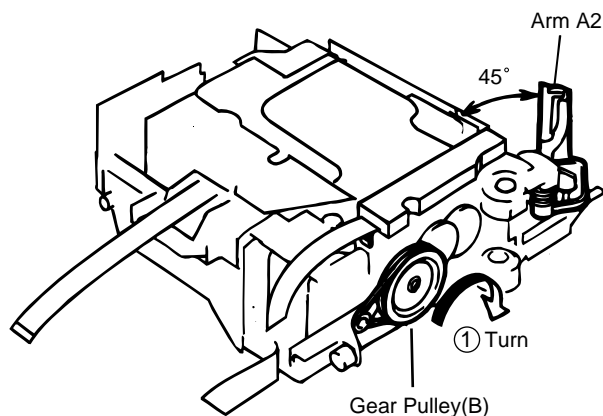


## ■ INSTALLING THE DISC RACK

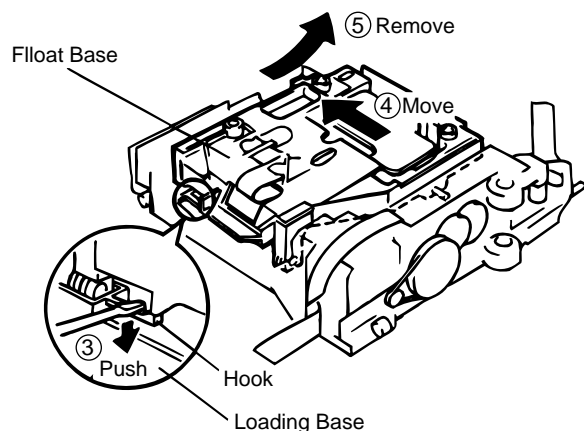


## REMOVING THE SERVO MECHANISM ASSY GM

- ① Turn gear pulley (B) and position Arm A2 as shown below.

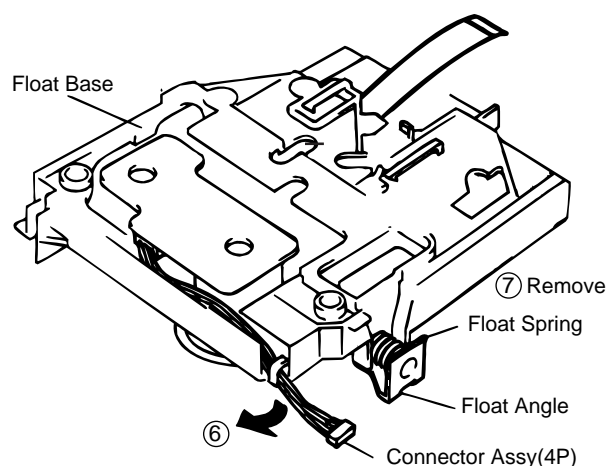


- ③ – ⑤ Slide the float base in the direction of the arrow ④ while pressing down on the loading base hook, and, lifting it gently, pull it out in the direction of the arrow ⑤.

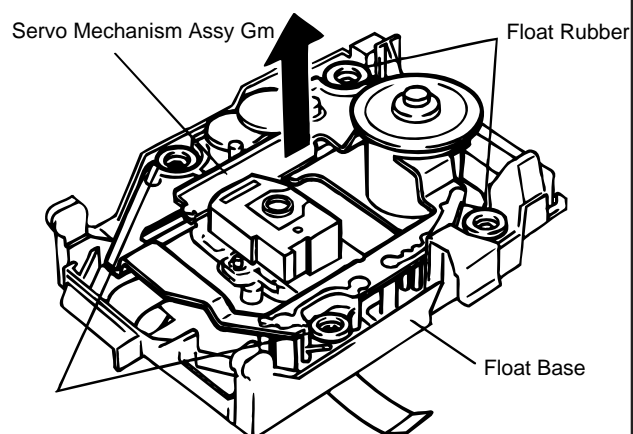


- ⑥ Remove the connector ASSY (4P) from the float base.

- ⑦ Remove the float spring. (To install this part, line up the float angle side of the Servo Mechanism ASSY GM first, and press down on the float base side.)



- ⑧ Remove the float rubber from the Servo Mechanism ASSY GM. At this time the float rubber should remain on the float base side. (To install it on the float base when it has been removed, push it into place with a thin cylindrical object.)

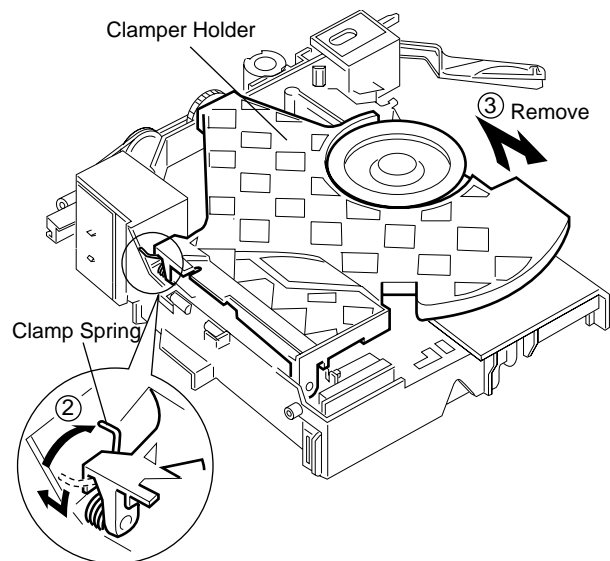


## REMOVING THE ARM A2

- ① Remove the float base together with the Servo Mechanism ASSY GM. (Refer to Steps ①-⑤ for “REMOVING THE SERVO MECHANISM ASSY GM”.)

② - ③

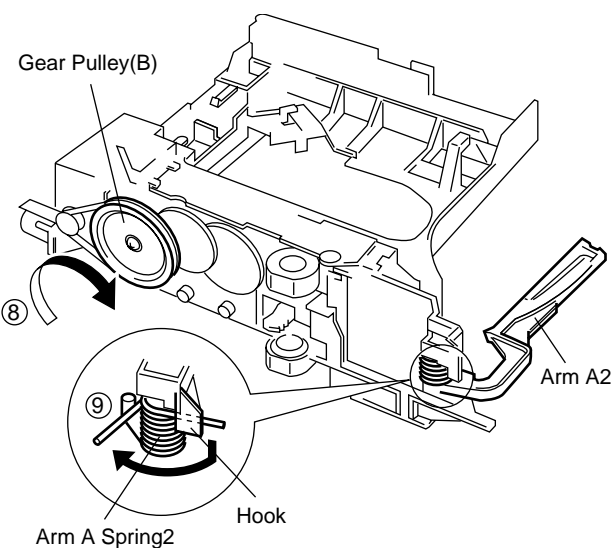
Remove the clamp spring and remove the clamber holder.



- ⑧ Turn gear pulley (B) and position Arm A2 as shown below.

- ⑨ Remove the Arm A spring2 from its hook.

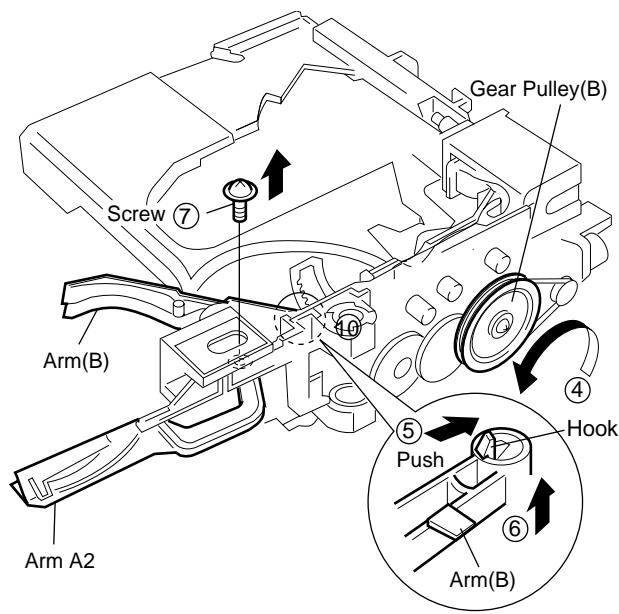
*Note: Do not hold the tip (blade) of arm (A) during operation.*



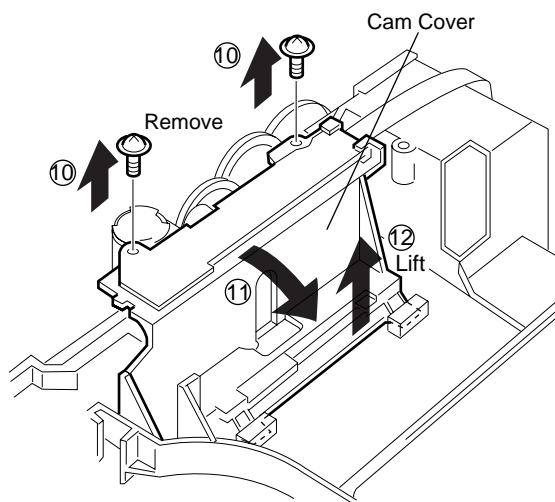
- ④ Turn gear pulley (B) and position Arm A2 as shown below.

- ⑤ ⑥ Remove Arm (B) while pressing the hook in the direction of the arrow.

- ⑦ Remove screw 7.



⑩ - ⑫

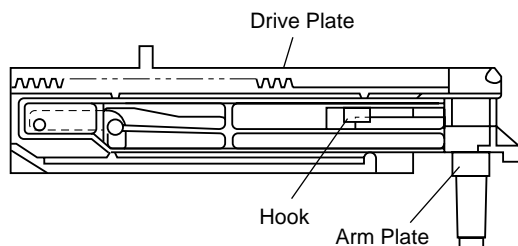


- ⑬ Remove drive plate, Arm plate, Arm A spring2 and Arm (A). (Refer to Steps 3-4 on page 47.)

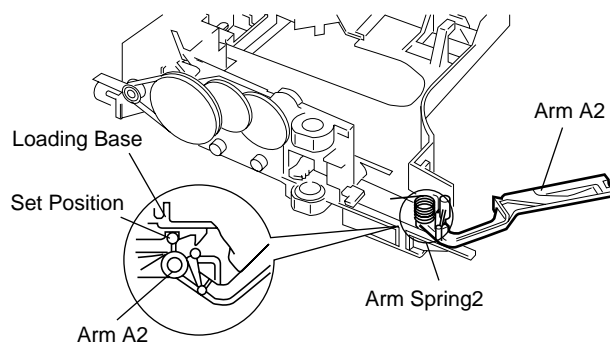


■ **FOR REASSEMBLY, REVERSE THE DISASSEMBLY PROCEDURE, and IN ADDITION CARRY OUT THE FOLLOWING ITEMS.**

- ① Assemble the arm plate as shown below, watching out for the drive plate hook.

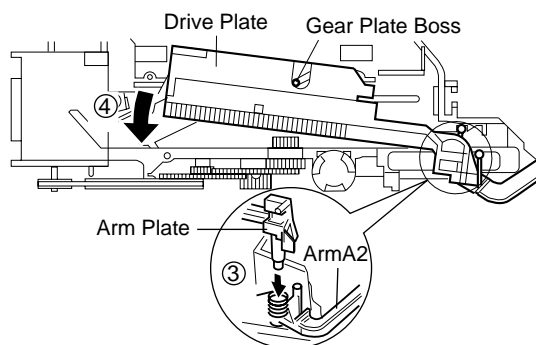


- ② Place Arm A2 and the Arm A spring2 on the loading base, being careful to keep them in the position shown below.

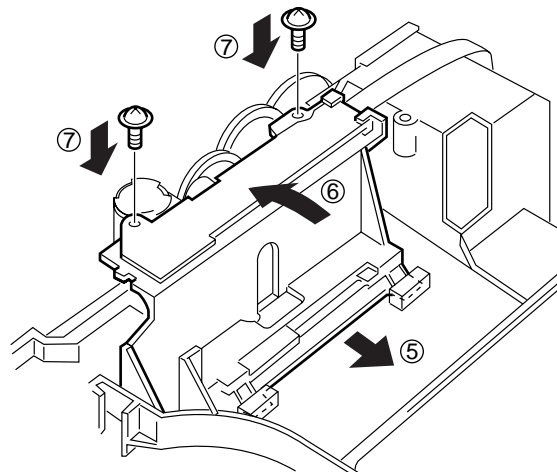


- ③ Set the drive plate and arm plate, which were assembled in Step ①, on the Arm A2 side as shown below. At this time be careful to keep Arm A2 in the position described in Step ②.

- ④ Insert the gear plate boss into the drive plate groove and pull it toward you.



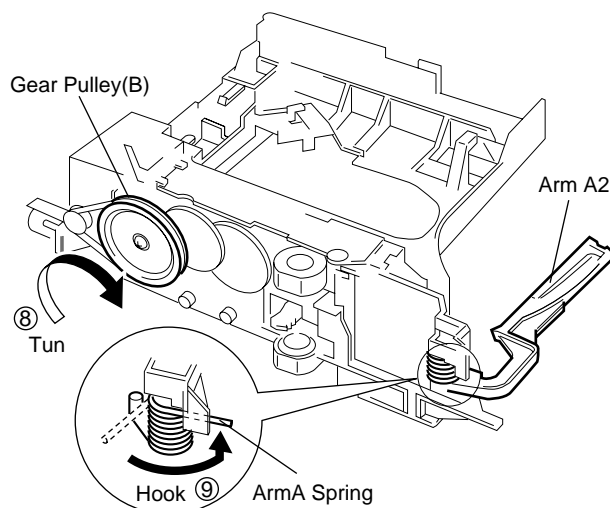
- ⑤ – ⑦

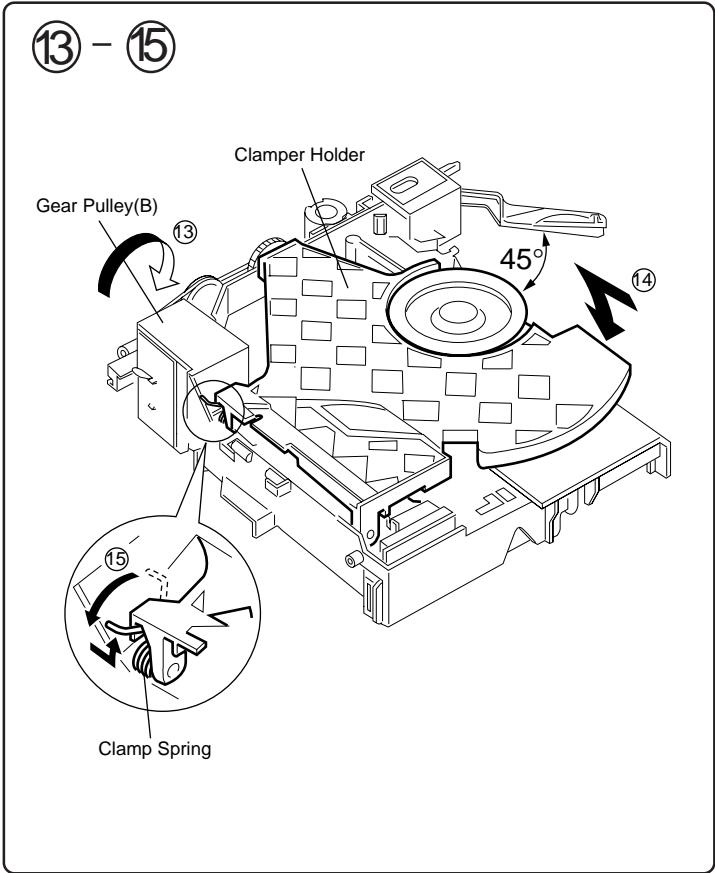
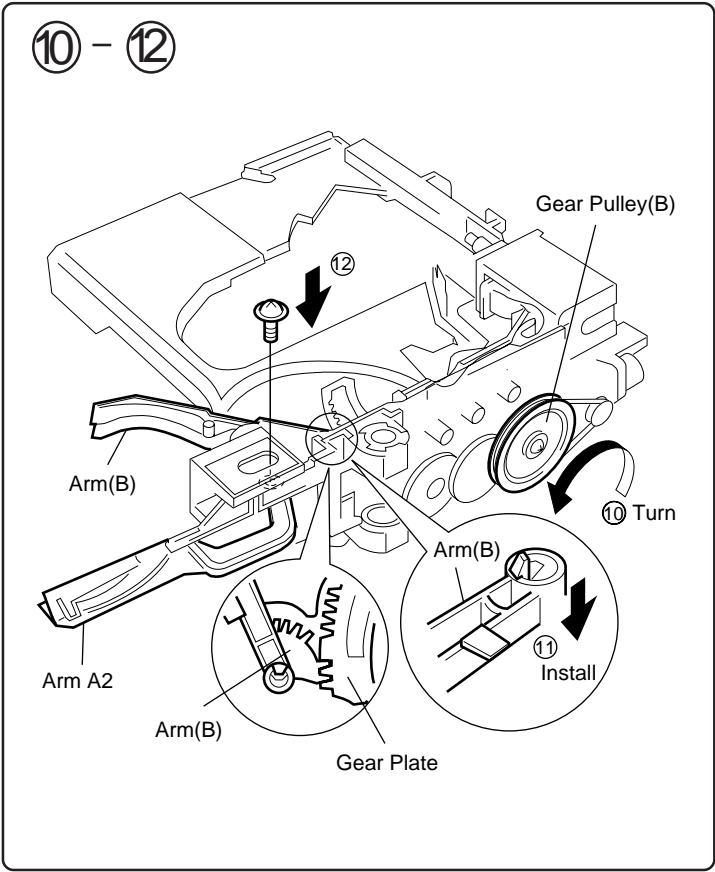


- ⑧ Turn gear pulley (B) and position Arm A2 as shown below.

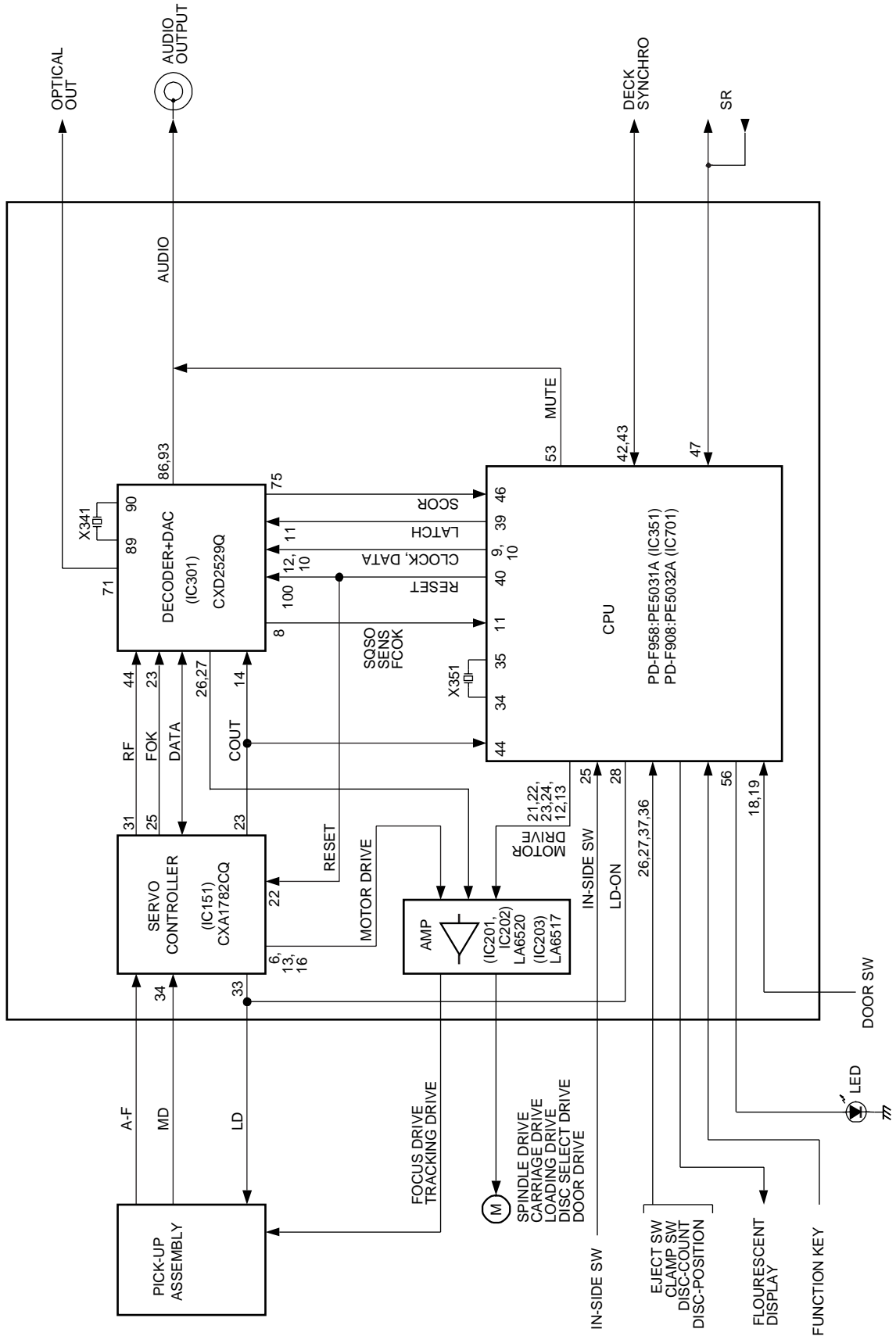
- ⑨

*Note : Do not hold the tip (blade) of arm A2 during operation.*



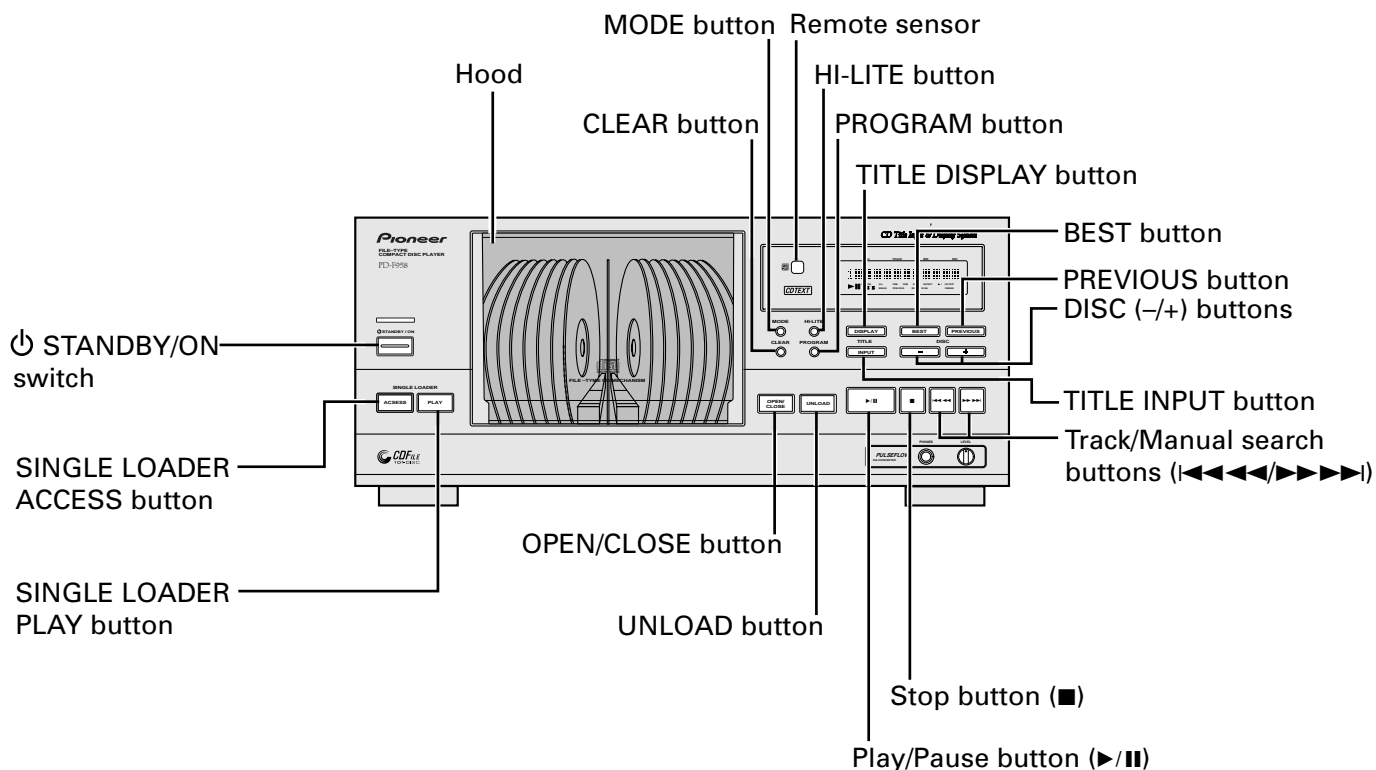


## 7.3 BLOCK DIAGRAM

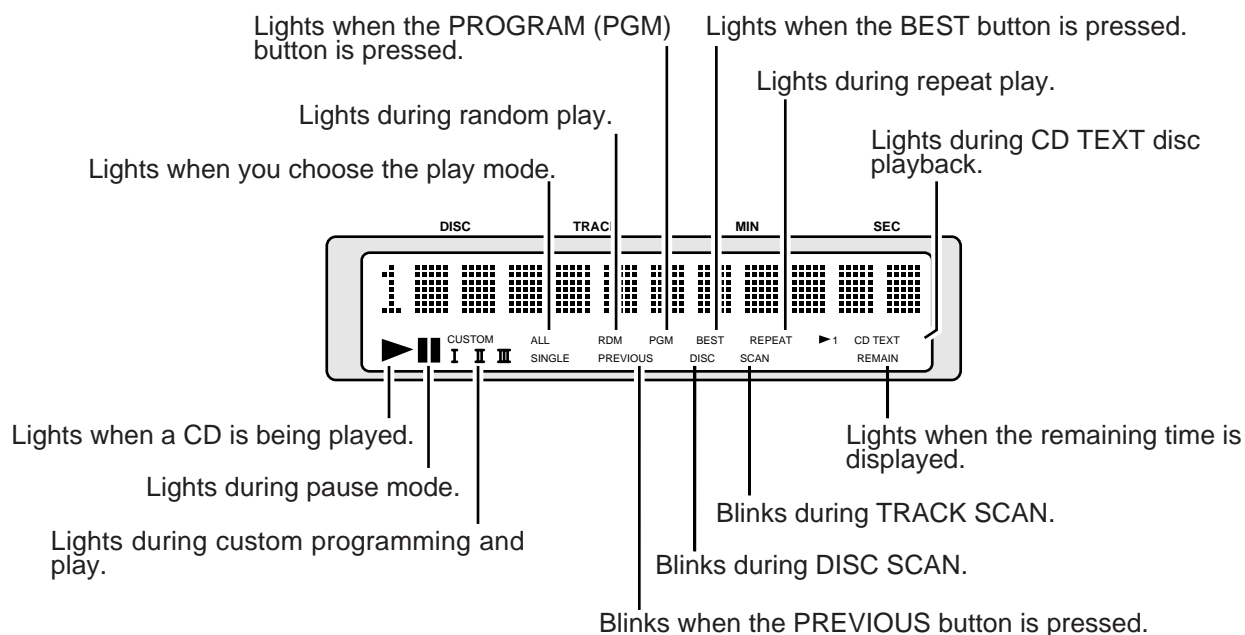


## 8. PANEL FACILITIES AND SPECIFICATIONS

### FRONT PANEL



### DISPLAY



## SPECIFICATION

### 1. General

Type ..... Compact disc digital audio system  
Power requirements

U.S. and Canadian models ..... AC 120V, 60 Hz

U.K. and European models ..... AC 220-230V, 50/60 Hz

Power consumption

U.S. and Canadian models ..... 12W

U.K. and European models ..... 14W

Power consumption in standby mode ..... 3W

Operating temperature ..... +5°C - +35°C  
(+41°F - +95°F)

Weight ( without package ) ..... 6.5 kg (14 lb 3 oz.)

External dimensions ..... 420(W) X 402(D) X 193(H) mm  
16-9/16(W) X 15-13/16(D) X 7-10/16(H) in.

### 2. Audio section

Frequency response ..... 2 Hz - 20 kHz

S/N ratio ..... 98 dB or more (EIAJ)

Dynamic range ..... 96 dB or more (EIAJ)

Channel separation ..... 96 dB or more (EIAJ)

Harmonic distortion ..... 0.003 % or less (EIAJ)

Level difference between channels ..... 1.0 dB or less (EIAJ)

Output voltage ..... 2 Vrms (EIAJ)

Wow and flutter ..... less than  $\pm 0.001$  % (W.PEAK)  
( below measurable level ) (EIAJ)

Channels ..... 2-channel ( stereo )

### 3. Output terminal

Audio line output

Control input jack (Except for U.K. model)

Control output jack (Except for European and U.K. models)

CD-DECK SYNCHRO jack

Optical digital output jack

I/O interface (Except for U.K. and F908 models)

Head phone jack with volume control

(Except for U.S. and Canadian models)

### 4. Accessories

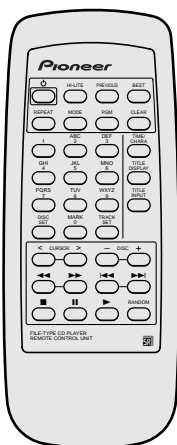
- Remote control unit ..... 1
- Size AA/R6P dry cell batteries ..... 2
- Output cable ..... 1
- Control cable (Except for European and U.K. models) ..... 1
- CD liner notes file (Except for U.S. and Canadian models) ..... 1
- Index label sheet (Except for U.S. and Canadian models) ..... 1
- Operating instructions ..... 1

#### Note.

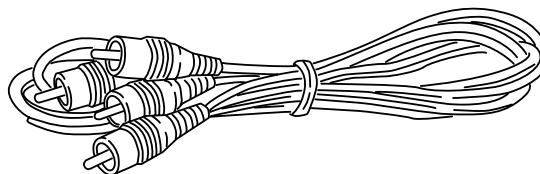
*Specifications and design subject to possible modification without notice, due to improvements.*

## ACCESSORIES

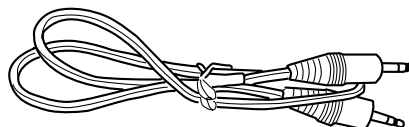
Remote control unit  
(PWW1148 : CU-PD101)



Output cable  
( PDE1248 : L=1.0m )



Control cable  
( PDE1247 : L=1.0m )



Size AA/R6P dry cell  
batteries ( VEM1010 )

